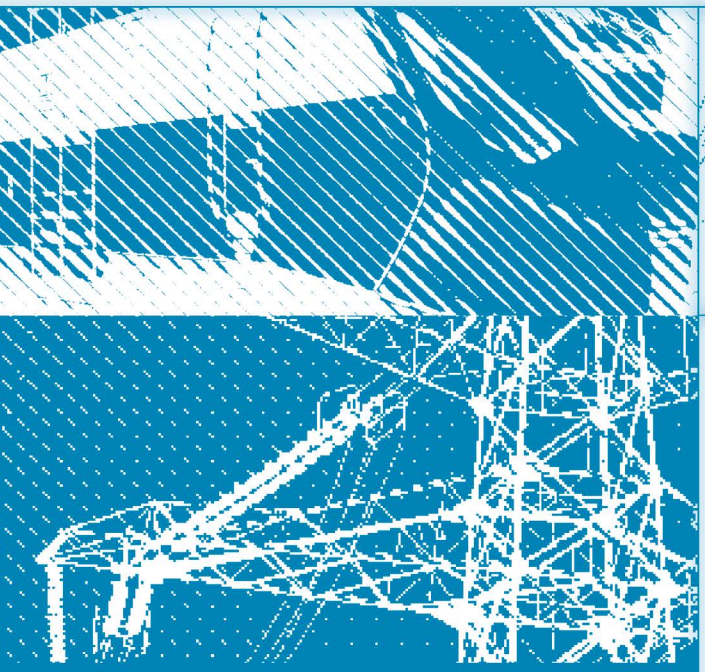
P O W E R



PRODUCT CATALOGUE

2025

POWER FOR
A BETTER FUTURE

MINMAX®

SINCE 1990

2025
NEW PRODUCTS

POWER FOR A
BETTER FUTURE

MINMAX®

Maximum Power. Minimal Space!
SIP-8 Isolated 10W DC-DC Converters

MCWI10 Series

NEW

Ultra-high Power Density
65W/in³

Excellent Efficiency
up to 89%

Ultra-wide Input Range
4:1 for 4.5-18, 9-36, 18-75 VDC

Real 10 Watt
No Line Derating

81% Smaller

More Info.

RoHS Compliant
CONFLICT FREE MINERALS POLICY
3 YEAR WARRANTY

MINMAX®

Unleashing Power in Tiny Form.

SIP-8 Isolated 10W DC-DC Converters

MCWI08 Series

NEW

Ultra-high Power Density

52W/in³

Excellent Efficiency

up to 88%

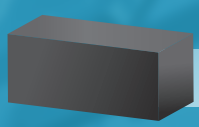
Ultra-wide Input Range

4:1 for 4.5-18, 9-36, 18-75 VDC

Real 8 Watt

No Line Derating

81% Smaller



21.8×9.6×12.0 mm

More Info.

RoHS Compliant

CONFLICT FREE MINERALS POLICY

3 YEAR WARRANTY

MINMAX®

2"×1" Industrial 80W DC-DC Converters

MKWI80 Series

NEW

Ultra-high Power Density

93W/in³

100%

Higher Power Density

Excellent Efficiency

up to 92%

Ultra-wide Input Range

4:1 for 9-36, 18-75 VDC

Real 80 Watt

No Line Derating

More Info.

RoHS Compliant

CONFLICT FREE MINERALS POLICY

3 YEAR WARRANTY

MINMAX®

1"×1" Industrial 40W DC-DC Converters

MJWI40 Series

NEW

Ultra-high Power Density

93W/in³

Excellent Efficiency

up to 93%

Ultra-wide Input Range

4:1 for 9-36, 18-75 VDC

Real 40 Watt

No Line Derating

70% Smaller

More Info.

RoHS Compliant

CONFLICT FREE MINERALS POLICY

3 YEAR WARRANTY

MINMAX®

Railway Certified | Quarter-Brick

MRZI75 NEW Series

75W DC-DC Converters

-40°C
+105°C

Passed TCT 1000+ Cycles

Up To 91%

Excellent Efficiency

Input Output
Reinforced Insulation

I/O Isolation 2000 VAC

EN50155

EN 50155 Approved

More Info.

EN45545-2 · UL 62368-1 · CB Scheme · CE · RoHS Compliant · Conflict Free Minerals Policy · 3 Year Warranty

ALL PRODUCTS

POWER FOR A BETTER FUTURE

SIP Package DC-DC Converters, 1-10W

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation (VDC)	Package	Safety	Page
MBU100	1W	2.97-3.63, 4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15	-	1000	SIP-4	-	14
MAU100	1W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15	-	1000	SIP-7	•	15
MA01	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 9, 12, 15, ±5,±9, ±12, ±15	-	1000	SIP-7	•	16
MA01H	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 9, 12, 15	-	3000	SIP-7	•	17
MAU200	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15	-	3000	SIP-7	•	18
MAPU01H	1W	2.97-3.63, 4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±12, ±15	-	3000	SIP-7	•	19
MAW01	1W	4.5-9, 9-18, 18-36, 36-75	5, 12, 15, 24, ±12, ±15	•	1500	SIP-6	•	20
MAU300	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 12, 15, ±5, ±12, ±15	-	1000	SIP-7	-	21
MAPU02H	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±12, ±15	-	3000	SIP-7	-	22
MCW1000	2W	4.5-9, 9-18, 18-36, 36-75	3.3, 5, 12	•	1000	SIP-8	•	23
MCWI02	2W	4.5-18, 9-36, 18-75	3.3, 5, 12, 15, ±5, ±12, ±15	•	1500	SIP-8	•	24
MEW1000	2W	9-36, 18-75	3.3, 5, 12, 15, ±5, ±12, ±15	•	1500	SIP-9	•	25
MBSU03	3W	4.5-5.5,10.8-13.2, 21.6-26.4	5, 12, 15	-	1500	SIP-4	•	26
MA03	3W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 9, 12, 15	-	1000	SIP-7	•	27
MCW03	3W	4.5-9, 9-18, 18-36,36-75	3.3, 5, 12, 15, ±5, ±12, ±15	•	1600	SIP-8	•	28
MCWI03	3W	4.5-18, 9-36, 18-75	3.3, 5, 12, 15, ±5, ±12, ±15	•	1600	SIP-8	•	29
MCW04	4W	9-18, 18-36, 36-75	5, 12, 15, 24, ±12, ±15	•	1600	SIP-8	•	30
MCWI04	4W	9-36, 18-75	5, 12, 15, 24, ±12, ±15	•	1600	SIP-8	•	31
MCWI05	5W	4.5-18, 9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	•	1500	SIP-8	•	32
NEW MCWI08	8W	4.5-18, 9-36, 18-75	5, 12, 15, 24, ±12, ±15	•	1500	SIP-8	•	33
NEW MCWI10	10W	4.5-18, 9-36, 18-75	5.1, 12, 15, 24, ±12, ±15	•	1500	SIP-8	•	34

SMD Package DC-DC Converters, 1-6W

MSLU100	1W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±12, ±15	-	1500	SMD	•	35
MSLU300	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 12, 15, ±5, ±12, ±15	-	3000	SMD	-	36
MSPU01H	1W	2.97-3.63, 4.5-5.5, 10.8-13.2	3.3, 5, 12, 15, ±5, ±12, ±15	-	3000	SMD	•	37
MSCW01	1W	4.5-9, 9-18, 18-36, 36-75	5, 12, 15, ±12, ±15	•	1500	SMD	•	38
NEW MSU01	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 12, 15, 24, ±5, ±12, ±15	-	1500	SMD	-	39
MSLU400	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 12, ±5, ±12, ±15	-	1500	SMD	-	40
MSDW1000	2W	4.5-9, 9-18, 18-36, 36-75	3.3, 5, 12, 15, ±5, ±12, ±15	•	1500	SMD	•	41
MSCWI02	2W	4.5-12, 9-36, 18-75	5, 12, 15, 24, ±12,±15	•	1500	SMD	•	42
NEW MSU02	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 12, 15, 24, ±5, ±12, ±15	-	1500	SMD	-	43
MSDWI03	3W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	•	1500	SMD	•	44
MSCWI03	3W	4.5-12, 9-36, 18-75	5, 12, 15, 24, ±12, ±15	•	1500	SMD	•	45
MSGWI06	6W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	•	1500	SMD	•	46

DIP Package DC-DC Converters, 1-20W

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation (VDC)	Package	Safety	Page
MFSU01	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15	-	1500	DIP-8	-	47
MFU100	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 9, 12, 15	-	3000	DIP-8	•	48
MFPU01H	1W	2.97-3.63, 4.5-5.5, 10.8-13.2	3.3, 5, 12, 15 , ±5, ±12, ±15	-	3000	DIP-8	•	49
MFW02	2W	4.5-10, 9-18, 18-36, 36-75	3.3, 5, 12, 15, ±5, ±12, ±15	•	1500	DIP-8	•	50
MDW1000	2W	4.5-9, 9-18, 18-36. 36-75	3.3, 5, 12, 15, ±5, ±12, ±15	•	1500	DIP-16	•	51
MFW03	3W	4.5-10, 9-18, 18-36, 36-75	3.3, 5, 12, 15, ±5, ±12, ±15	•	1500	DIP-8	•	52
MDWI03	3W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	•	1500	DIP-16	•	53
MIAR03	3W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	•	1500	DIP-24	•	54
MIW1100	3W	4.5-9, 9-18, 18-36, 36-75, 10-30	5, 12, 15, ±12, ±15	•	1500	DIP-24	•	55
MIW03	3W	4.5-9, 9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	•	1500 3000	DIP-24	•	56
MIWI03	3W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	•	1500 3000	DIP-24	•	57
MIW06	6W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	•	1500 3000	DIP-24	•	58
MIWI06	6W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	•	1500 3000	DIP-24	•	59
MDWI06	6W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	•	1500	DIP-16	•	60
MDW08	8W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±12, ±15	•	1500	DIP-16	•	61
MDWI08	8W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	•	1500	DIP-16	•	62
MDW10	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	•	1500	DIP-16	•	63
MDWI10	10W	9-36, 18-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	•	1500	DIP-16	•	64
MIW10	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, ±12, ±15	•	1500	DIP-24	•	65
MIWI10	10W	9-36, 18-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	•	1500	DIP-24	•	66
MDW12	12W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24, ±12, ±15	•	1500	DIP-16	•	67
MDWI12	12W	9-36, 18-75	5, 5.1, 12, 15, 24, ±12, ±15	•	1500	DIP-16	•	68
NEW MDW15	15W	9-18, 18-36, 36-75	5.1, 12, 15, 24, ±12, ±15	•	1500	DIP-16	•	69
NEW MDWI15	15W	9-36, 18-75	5.1, 12, 15, 24, ±12, ±15	•	1500	DIP-16	•	70
NEW MDWI20	20W	4.5-18, 9-36, 18-75	5, 12, 15, 24, ±12, ±15	•	1500	DIP-16	•	71

1" ×1" Package DC-DC Converters, 10-40W

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation (VDC)	Package	Safety	Page
MJW10	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, ±5, ±12, ±15	•	1500	1" ×1"	•	72
MJWI10	10W	9-36, 18-75	3.3, 5, 5.1, 12, 15, 24, ±5, ±12, ±15	•	1500	1" ×1"	•	73
MJW15	15W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±12, ±15	•	1500	1" ×1"	•	74
MJWI15	15W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	•	1500	1" ×1"	•	75
MJWI20	20W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	•	1500	1" ×1"	•	76
MJW25	25W	9-18, 18-36, 36-75	3.3, 5, 12, 15, ±12, ±15	•	1500	1" ×1"	•	77
MJWI25	25W	9-36, 18-75	3.3, 5, 12, 15, ±12, ±15	•	1500	1" ×1"	•	78
MJWI30	30W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	•	1500	1" ×1"	•	79
NEW MJWI40	40W	9-36, 18-75	5, 12, 15, 24, 48, 54, ±12, ±15	•	1500	1"x1"	•	80

2" ×1" Package DC-DC Converters, 40-80W

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation (VDC)	Package	Safety	Page
MKW40	40W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±12, ±15	•	1500	2" ×1"	•	81
MKWI40	40W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	•	1500	2" ×1"	•	82
MKW50	50W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24	•	1500	2" ×1"	•	83
MKWI50	50W	9-36, 18-75	3.3, 5, 12, 15, 24	•	1500	2" ×1"	•	84
NEW MKWI80	80W	9-36, 18-75	5, 12, 15, 24, 48, 54, ±12, ±15	•	1500	2"x1"	•	85

Chassis & Din-Rail Mounting Package DC-DC Converters, 6-60W

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation (VDC)	Package	Safety	Page
MJWI06C	6W	9-36, 18-75	5, 5.1, 12,15, 24, 48, ±12, ±15, ±24	•	3000VDC	Chassis Din-Rail	•	86
MKW10C	10W	9-36, 18-75	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	•	3000VDC	Chassis Din-Rail	•	87
MOWI20C	20W	9-36, 18-75	5.1, 12, 24, 48	•	2500VDC	Chassis Din-Rail	•	88
MQWI40C	40W	9-36, 18-75	5.1, 12, 24, 48	•	2500VDC	Chassis Din-Rail	•	89
MRWI60C	60W	9-36, 18-75	5.1, 12, 24, 48	•	2500VDC	Chassis Din-Rail	•	90

Switching Regulators, 0.5-1A

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation (VDC)	Package	Safety	Page
M78AR-0.5	0.5A	(4.75/6.5/8/11/15/18)-32	1.5, 1.8, 2.5, 3.3, 5, 6.5, 9, 12, 15	•	-	SIP-3	•	91
M78SAR-0.5	0.5A	(4.75/6.5/8/11/15/18)-32	1.5, 1.8, 2.5, 3.3, 5, 6.5, 9, 12, 15	•	-	SMD	•	92
M78AR-1	1A	(6.5/15)-32	3.3, 5, 12,	•	-	SIP-3	•	93

GENERAL INDUSTRIAL POWER SOLUTIONS

AC-DC Power Supplies, 3-60W

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation (VAC)	Package	Safety	Page
AAF-03	3W	85 – 264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24	•	3000 VAC Reinforced	PCB	•	94
ABF-04	4W	85 – 264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 5/3.3, 12/5, ±12, ±15	•	3000 VAC Reinforced	PCB	•	95
AAF-05	5W	85 – 264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 48	•	3000 VAC Reinforced	PCB Chassis	•	96
AMF-07	7W	85 – 264VAC 90-370VDC	5, 12, 15, 24, 48	•	3000 VAC Reinforced	PCB Chassis	•	97
ACF-10	10W	85 – 264VAC 120-370VDC	3.3, 5, 12, 15, 24, 48	•	4000 VAC Reinforced	PCB	•	98
AMF-15	15W	85 – 264VAC 90-370VDC	5.1, 12, 15, 24, 48	•	3000 VAC Reinforced	PCB Chassis DIN-Rail	•	99
AGF-15	15W	85 – 264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 48	•	3000 VAC Reinforced	PCB	•	100
AMF-30	30W	85 – 264VAC 90-370VDC	5.1, 12, 15, 24, 48	•	3000 VAC Reinforced	PCB Chassis DIN-Rail	•	101
AMF-60	60W	85 – 264VAC 90-370VDC	5.1, 12, 15, 24, 48	•	3000 VAC Reinforced	PCB Chassis DIN-Rail	•	102

RAILWAY CERTIFIED POWER SOLUTIONS

Railway Certified DC-DC Converters, 3-150W

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation	Package	Safety	Page
MIZI03	3W	9-36 ,18-75 40-160	5, 12, 15, ±12, ±15	•	3000VAC Reinforced	DIP	•	106
MKZI10	10W	9-36 ,18-75 40-160	5, 12, 15, 24, ±12, ±15	•	3000VAC Reinforced	2" ×1"	•	107
MKZI20	20W	9-36 ,18-75 40-160	5, 12, 15, 24, ±12, ±15	•	3000VAC Reinforced	2" ×1"	•	108
MKZI40	40W	36-160	5, 12, 15, 24, 54, ±12, ±15	•	3000VAC Reinforced	2" ×1"	•	109
MTQZ50	50W	43-101 66-160	5, 12, 15, 24	•	3000VAC Reinforced	Quarter Brick	•	110
NEW MRZI75	75W	36-160	5, 12, 15, 24, 54	•	2000VAC Reinforced	Quarter Brick	•	111
MRZI100	100W	36-160	5, 12, 15, 24, 54	•	2000VAC Reinforced	Quarter Brick	•	112
MRZI150	150W	36-160	5, 12, 15, 24, 54	•	2000VAC Reinforced	Quarter Brick	•	113
NEW MRHI150	150W	9-36	5, 12, 15, 24, 54	•	1680VAC Reinforced	Half Brick	•	114

Ultra-high Isolation DC-DC Converters, 1-60W

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation	Package	Safety	Page
MA01-HI	1W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15, +15/-9	-	5200VDC	SIP	•	118
MAEU01-HI	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15	-	3000VAC Reinforced	SIP	•	120
MAEU02-HI	2W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15, +15/-9	-	5200VDC	SIP	•	122
MSCEU01-HI	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	-	3000VAC Reinforced	SMD	•	124
MDEU02-HI	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	-	4000VAC Reinforced	DIP	•	125
MIR500	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±5, ±12, ±15	•	6000VDC	DIP	•	126
MIE03-HI	3.5W	4.5-9, 9-18, 18-36, 36-75	5, 5.8, 12, 15, 24, ±12, ±15	•	5000VAC Reinforced	DIP	•	127
MIEI03-HI	3W	9-40, 18-80	5, 12, ±12, ±15	•	8000VDC Reinforced	DIP	•	128
MIE06-HI	6W	9-18, 18-36, 36-75	5, 12, 15, 24, ±12, ±15	•	5000VAC Reinforced	DIP	•	129
MIE10-HI	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	•	5000VAC Reinforced	DIP	•	130
MKE15-HI	15W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24 ±12, ±15	•	4200VAC Reinforced	2" ×1"	•	131
MKE20-HI	20W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24 ±12, ±15	•	4200VAC Reinforced	2" ×1"	•	132
MJA06C	6W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	•	3000VAC Reinforced	Chassis Din-Rail	•	133
MKA10C	10W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	•	3000VAC Reinforced	Chassis Din-Rail	•	134
MOA20C	20W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	•	3000VAC Reinforced	Chassis Din-Rail	•	135
MQA40C	40W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	•	3000VAC Reinforced	Chassis Din-Rail	•	136
MRA60C	60W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	•	3000VAC Reinforced	Chassis Din-Rail	•	137

MEDICAL SAFETY POWER SOLUTIONS

Medicial Safety DC-DC Converters, 1-20W

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Output Regulation	Isolation (VAC)	Package	Safety	Page
MAU400	1W	4.5-5.5, 10.8-13.2	5, 12, 15, ±5, ±12, ±15	-	3000VAC Reinforced	SIP	•	140
MAU01M	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15	-	4000VAC Reinforced	SIP	•	141
MSCU01M	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	-	4000VAC Reinforced	SMD	•	142
MSHU100	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	-	4000VAC Reinforced	SMD	•	143
MDHU100	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	-	4000VAC Reinforced	DIP	•	144
MIHW2000	3W	9-40, 18-80, 36-160	5, 12, 15, ±12, ±15	•	4000VAC Reinforced	DIP	•	145
MIW03M	3.5W	4.5-9, 9-18, 18-36, 36-75	5, 5.8, 12, 15, ±12, ±15	•	5000VAC Reinforced	DIP	•	146
MIW06M	6W	9-18, 18-36, 36-75	5, 12, 15, ±12, ±15	•	5000VAC Reinforced	DIP	•	147
MIW10M	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	•	5000VAC Reinforced	DIP	•	148
MKW15M	15W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24, ±12, ±15	•	4200VAC Reinforced	2" ×1"	•	149
MKW20M	20W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24, ±12, ±15	•	4200VAC Reinforced	2" ×1"	•	150

Medicial Safety AC-DC Power Supplies, 24-60W

Series	Output Power	Input Voltage Range (VAC)	Output Voltage (VDC)	Output Regulation	Isolation (VAC)	Package	Safety	Page
AJM-24	24W	85-264	5, 9, 12, 15, 24, ±12 ±15	•	4000VAC Reinforced	PCB Chassis DIN-Rail	•	151
APM-40	40W	85-264	5, 12, 15, 24, ±12 ±15	•	4000VAC Reinforced	PCB Chassis DIN-Rail	•	152
AYM-60	60W	85-264	5.1, 12, 15, 24, 48	•	4000VAC Reinforced	PCB Chassis DIN-Rail	•	153

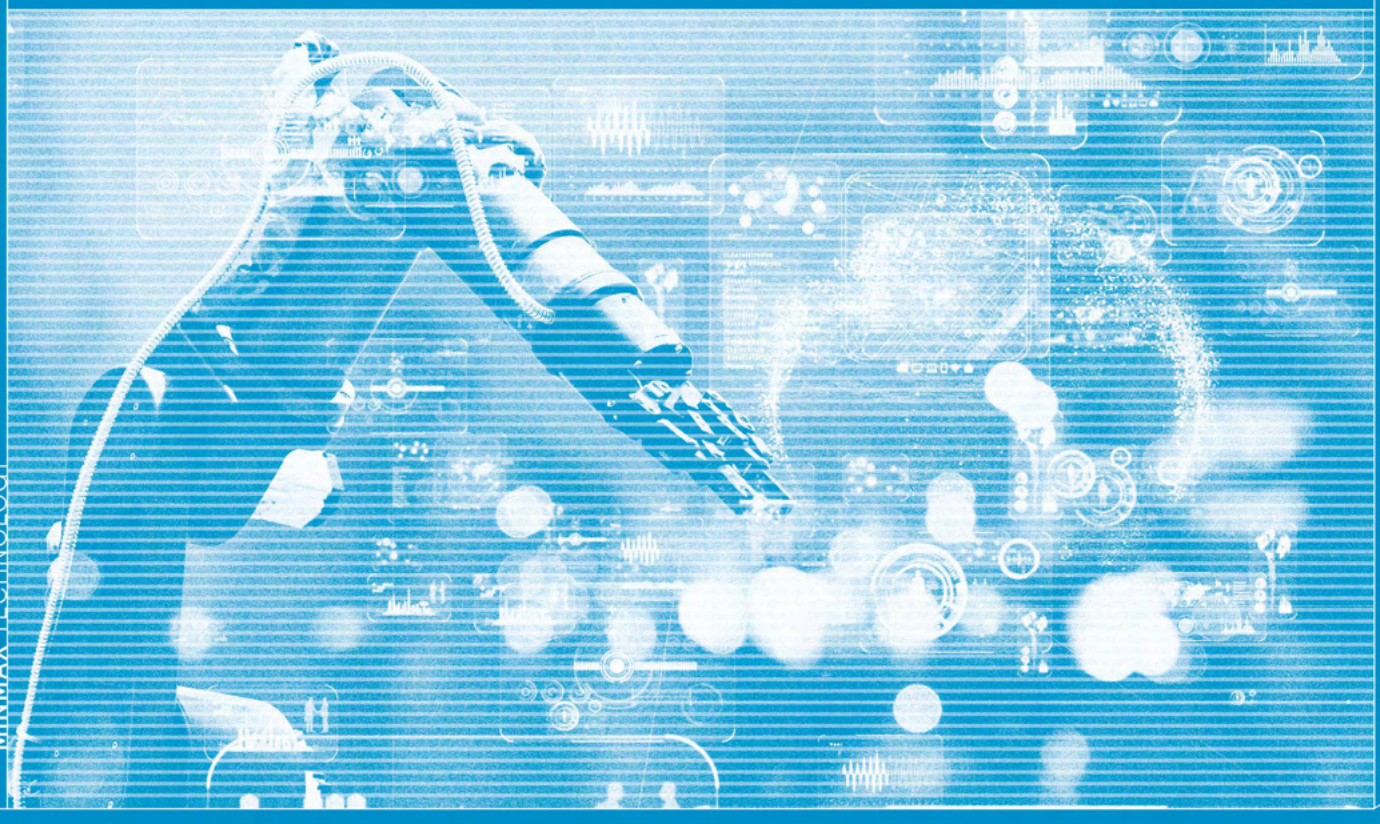
POWER FOR
A BETTER FUTURE

GENERAL INDUSTRIAL POWER SOLUTIONS

Power Density
4 x UP

75 % Board Space

79 % Weight



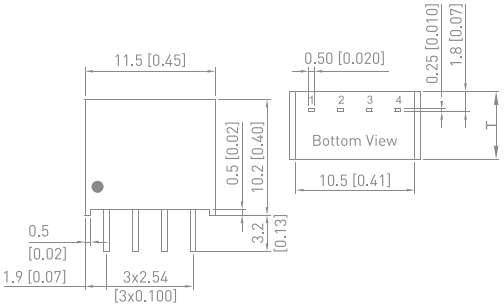
MINMAX TECHNOLOGY

MBU100 Series | 1W

- Industrial Standard SIP-4 Package
- Unregulated Output Voltage
- I/O Isolation 1000 VDC
- Wide Operating Temperature Range

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MBU135	3.3 (2.97 - 3.63)	3.3	260	74%
MBU131		5	200	77%
MBU105	5 (4.5 - 5.5)	3.3	260	72%
MBU101		5	200	69%
MBU102		9	110	76%
MBU103		12	84	77%
MBU104		15	67	78%
MBU111	12 (10.8 - 13.2)	5	200	71%
MBU112		9	110	77%
MBU113		12	84	79%
MBU114		15	67	80%
MBU121	24 (21.6 - 26.4)	5	200	70%
MBU122		9	110	76%
MBU123		12	84	79%
MBU124		15	67	79%

Mechanical Dimensions



Pin Connections

Pin	Function
1	-Vin
2	+Vin
3	-Vout
4	+Vout

T: 6.1[0.24] for 3.3V & 5V & 12V Input Models
T: 7.1[0.28]for 24V Input Models

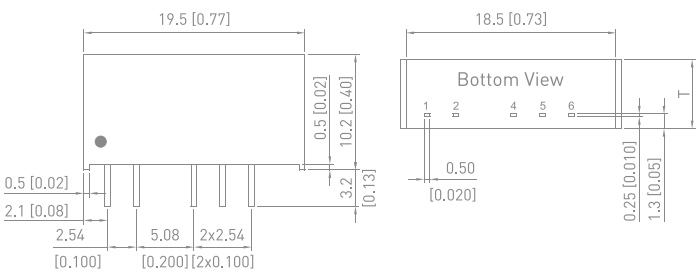
MAU100 Series | 1W

UL 60950-1 Scheme

- Industrial Standard SIP-7 Package
- Unregulated Output Voltage
- I/O Isolation 1000 VDC
- Wide Operating Temperature Range
- UL/cUL/IEC/EN 60950-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAU101	5 (4.5 - 5.5)	3.3	260	73%
MAU102		5	200	71%
MAU103		9	110	76%
MAU104		12	84	78%
MAU105		15	67	78%
MAU106		±5	±100	72%
MAU107		±9	±56	77%
MAU108		±12	±42	78%
MAU109		±15	±34	79%
MAU111	12 (10.8 - 13.2)	3.3	260	74%
MAU112		5	200	73%
MAU113		9	110	78%
MAU114		12	84	80%
MAU115		15	67	80%
MAU116		±5	±100	74%
MAU117		±9	±56	79%
MAU118		±12	±42	81%
MAU119		±15	±34	81%
MAU151	15 (13.5 - 16.5)	5	200	72%
MAU152		12	84	79%
MAU153		15	67	79%
MAU154		±5	±100	72%
MAU155		±12	±42	80%
MAU156		±15	±34	80%
MAU121	24 (21.6 - 26.4)	3.3	260	73%
MAU122		5	200	71%
MAU123		9	110	76%
MAU124		12	84	78%
MAU125		15	67	79%
MAU126		±5	±100	72%
MAU127		±9	±56	76%
MAU128		±12	±42	79%
MAU129		±15	±34	80%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
4	-Vout	-Vout
5	No Pin	Common
6	+Vout	+Vout

T: 6.1[0.24] for 5V & 12V Input Models
T: 7.1[0.28]for 24V Input Models

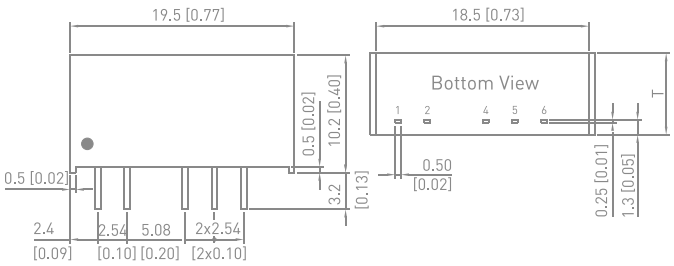
MA01 Series | 1W

cULus CB Scheme UL 60950-1 RoHS Compliant

- Industrial Standard SIP-7 Package
- Semi-regulated Output Voltage
- Very High Efficiency up to 88.5%
- I/O Isolation 1000 VDC
- Wide Operating Temperature Range
- UL/cUL/IEC/EN 60950-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MA01-05S05	5 (4.5 ~ 5.5)	5	200	84%
MA01-05S09		9	110	87%
MA01-05S12		12	84	87%
MA01-05S15		15	67	87.5%
MA01-05D05		±5	±100	84.5%
MA01-05D09		±9	±56	86%
MA01-05D12		±12	±42	86.5%
MA01-05D15		±15	±34	86.5%
MA01-12S05	12 (10.8 ~ 13.2)	5	200	84%
MA01-12S09		9	110	86.5%
MA01-12S12		12	84	86.5%
MA01-12S15		15	67	88%
MA01-12D05		±5	±100	84.5%
MA01-12D09		±9	±56	86%
MA01-12D12		±12	±42	88.6%
MA01-12D15		±15	±34	87.5%
MA01-24S05	24 (21.6 ~ 26.4)	5	200	84%
MA01-24S09		9	110	86.5%
MA01-24S12		12	84	87.5%
MA01-24S15		15	67	87.5%
MA01-24D05		±5	±100	83.5%
MA01-24D09		±9	±56	86%
MA01-24D12		±12	±42	87%
MA01-24D15		±15	±34	87%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
4	-Vout	-Vout
5	No Pin	Common
6	+Vout	+Vout

T: 6.1[0.24] for 5V & 12V Input Models
T: 7.1[0.28]for 24V Input Models

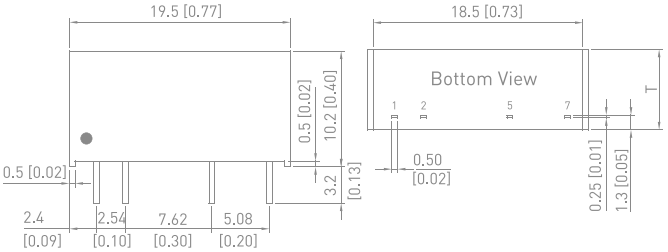
MA01H Series | 1W

UL 60950-1 Scheme

- Industrial Standard SIP-7 Package
- Semi-regulated Output Voltage
- Very High Efficiency up to 88%
- I/O Isolation 3000VDC
- Wide Operating Temperature Range
- UL/cUL/IEC/EN 60950-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MA01-05S05H	5 (4.5 ~ 5.5)	5	200	84%
MA01-05S09H		9	110	86.5%
MA01-05S12H		12	84	87%
MA01-05S15H		15	67	87.5%
MA01-12S05H	12 (10.8 ~ 13.2)	5	200	84%
MA01-12S09H		9	110	86%
MA01-12S12H		12	84	88%
MA01-12S15H		15	67	88%
MA01-24S05H	24 (21.6 ~ 26.4)	5	200	84%
MA01-24S09H		9	110	86.5%
MA01-24S12H		12	84	87.5%
MA01-24S15H		15	67	87.5%

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	-Vin
5	-Vout
7	+Vout

T: 6.1[0.24] for 5V & 12V Input Models
T: 7.1[0.28]for 24V Input Models

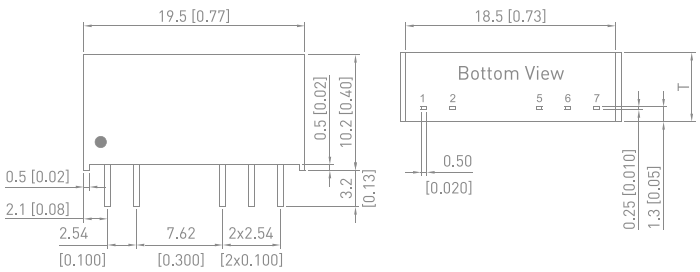
MAU200 Series | 1W

UL 60950-1 Scheme

- Industrial Standard SIP-7 Package
- Unregulated Output Voltage
- I/O Isolation 3000 VDC
- Wide Operating Temperature Range
- UL/cUL/IEC/EN 60950-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAU201	5 (4.5 - 5.5)	3.3	260	73%
MAU202		5	200	71%
MAU203		9	110	76%
MAU204		12	84	78%
MAU205		15	67	78%
MAU206		±5	±100	72%
MAU207		±9	±56	77%
MAU208		±12	±42	78%
MAU209		±15	±34	79%
MAU211	12 (10.8 - 13.2)	3.3	260	74%
MAU212		5	200	73%
MAU213		9	110	78%
MAU214		12	84	80%
MAU215		15	67	80%
MAU216		±5	±100	74%
MAU217		±9	±56	79%
MAU218		±12	±42	81%
MAU219		±15	±34	81%
MAU221	15 (13.5 - 16.5)	3.3	260	73%
MAU222		5	200	71%
MAU223		9	110	76%
MAU224		12	84	78%
MAU225		15	67	79%
MAU226		±5	±100	72%
MAU227		±9	±56	76%
MAU228		±12	±42	79%
MAU229		±15	±34	80%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
5	-Vout	-Vout
6	No Pin	Common
7	+Vout	+Vout

T: 6.1[0.24] for 5V & 12V Input Models
T: 7.1[0.28]for 24V Input Models

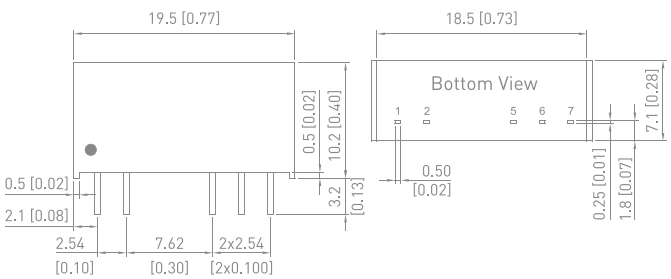
MAPU01H Series | 1W

UL 62368-1 Scheme

- Industrial Standard SIP-7 Package
- Unregulated Output Voltage
- I /O Isolation 3000VDC
- Wide Operating Temperature Range
- Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAPU01-033S033H	3.3 (2.97 - 3.63)	3.3	300	77%
MAPU01-033S05H		5	200	77%
MAPU01-033S09H		9	110	78%
MAPU01-033S12H		12	84	80%
MAPU01-033S15H		15	68	79%
MAPU01-033D05H		±5	±100	77%
MAPU01-033D12H		±12	±42	79%
MAPU01-033D15H		±15	±34	79%
MAPU01-05S033H	5 (4.5 - 5.5)	3.3	300	76%
MAPU01-05S05H		5	200	78%
MAPU01-05S09H		9	110	81%
MAPU01-05S12H		12	84	82%
MAPU01-05S15H		15	68	83%
MAPU01-05D05H		±5	±100	81%
MAPU01-05D12H		±12	±42	81%
MAPU01-05D15H		±15	±34	81%
MAPU01-12S033H	12 (10.8 - 13.2)	3.3	300	79%
MAPU01-12S05H		5	200	80%
MAPU01-12S09H		9	110	82%
MAPU01-12S12H		12	84	84%
MAPU01-12S15H		15	68	83%
MAPU01-12D05H		±5	±100	81%
MAPU01-12D12H		±12	±42	82%
MAPU01-12D15H		±15	±34	82%
MAPU01-24S033H	24 (21.6 - 26.4)	3.3	300	76%
MAPU01-24S05H		5	200	81%
MAPU01-24S09H		9	110	79%
MAPU01-24S12H		12	84	82%
MAPU01-24S15H		15	68	82%
MAPU01-24D05H		±5	±100	80%
MAPU01-24D12H		±12	±42	81%
MAPU01-24D15H		±15	±34	80%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
5	-Vout	-Vout
6	No Pin	Common
7	+Vout	+Vout

To order the converter for another type pin, please refer to the datasheet.

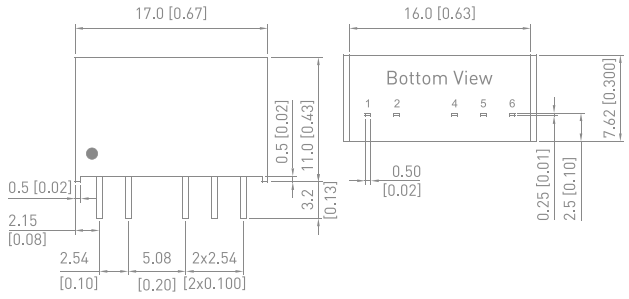
MAW01 Series | 1W

UL 62368-1 Scheme

- Industrial Standard SIP-6 Package
- Wide 2 : 1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload and Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAW01-05S05	5 (4.5 ~ 9)	5	200	76%
MAW01-05S12		12	83	77%
MAW01-05S15		15	67	79%
MAW01-05S24		24	42	76%
MAW01-05D12		±12	±42	77%
MAW01-05D15		±15	±33	78%
MAW01-12S05	12 (9 ~ 18)	5	200	77%
MAW01-12S12		12	83	77%
MAW01-12S15		15	67	80%
MAW01-12S24		24	42	77%
MAW01-12D12		±12	±42	79%
MAW01-12D15		±15	±33	78%
MAW01-24S05	24 (18 ~ 36)	5	200	77%
MAW01-24S12		12	83	80%
MAW01-24S15		15	67	80%
MAW01-24S24		24	42	77%
MAW01-24D12		±12	±42	80%
MAW01-24D15		±15	±33	80%
MAW01-48S05	48 (36 ~ 75)	5	200	77%
MAW01-48S12		12	83	78%
MAW01-48S15		15	67	78%
MAW01-48S24		24	42	76%
MAW01-48D12		±12	±42	79%
MAW01-48D15		±15	±33	79%

Mechanical Dimensions



Pin Connections

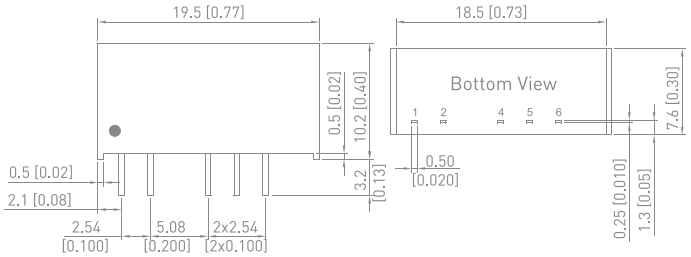
Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
4	+Vout	+Vout
5	No Pin	Common
6	-Vout	-Vout

MAU300 Series 2W

- Industrial Standard SIP-7 Package
- I/O Isolation 1000 VDC
- Wide Operating Temperature Range

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAU301	5 (4.5 ~ 5.5)	3.3	500	73%
MAU303		5	400	76%
MAU303		12	165	80%
MAU304		15	133	80%
MAU305		±5	±200	77%
MAU306		±12	±83	79%
MAU307		±15	±66	79%
MAU311	12 (10.8 ~ 13.2)	3.3	500	74%
MAU312		5	400	78%
MAU313		12	165	82%
MAU314		15	133	83%
MAU315		±5	±200	79%
MAU316		±12	±83	82%
MAU317		±15	±66	82%
MAU321	24 (21.6 ~ 26.4)	3.3	500	74%
MAU322		5	400	77%
MAU323		12	165	81%
MAU324		15	133	82%
MAU325		±5	±200	79%
MAU326		±12	±83	81%
MAU327		±15	±66	82%

Mechanical Dimensions



Pin Connections

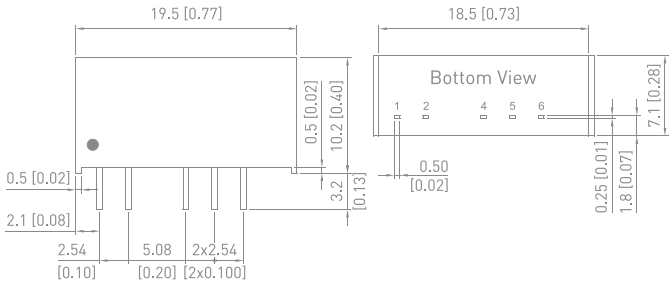
Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
4	-Vout	-Vout
5	No Pin	Common
6	+Vout	+Vout

MAPU02H Series | 2W

- Industrial Standard SIP-7 Package
- Unregulated Output Voltage
- I/O Isolation 3000VDC
- Wide Operating Temperature Range
- Short Circuit Protection

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAPU02-05S033H	5 (4.5 - 5.5)	3.3	500	74%
MAPU02-05S05H		5	400	78%
MAPU02-05S09H		9	222	79%
MAPU02-05S12H		12	168	81%
MAPU02-05S15H		15	132	80%
MAPU02-05D05H		±5	±200	77%
MAPU02-05D12H		±12	±84	79%
MAPU02-05D15H		±15	±66	78%
MAPU02-12S033H	12 (10.8 - 13.2)	3.3	500	76%
MAPU02-12S05H		5	400	78%
MAPU02-12S09H		9	222	80%
MAPU02-12S12H		12	168	82%
MAPU02-12S15H		15	132	81%
MAPU02-12D05H		±5	±200	78%
MAPU02-12D12H		±12	±84	81%
MAPU02-12D15H		±15	±66	81%
MAPU02-24S033H	24 (21.6 - 26.4)	3.3	500	76%
MAPU02-24S05H		5	400	78%
MAPU02-24S09H		9	222	79%
MAPU02-24S12H		12	168	81%
MAPU02-24S15H		15	132	79%
MAPU02-24D05H		±5	±200	76%
MAPU02-24D12H		±12	±84	80%
MAPU02-24D15H		±15	±66	79%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
4	-Vout	-Vout
5	No Pin	Common
6	+Vout	+Vout

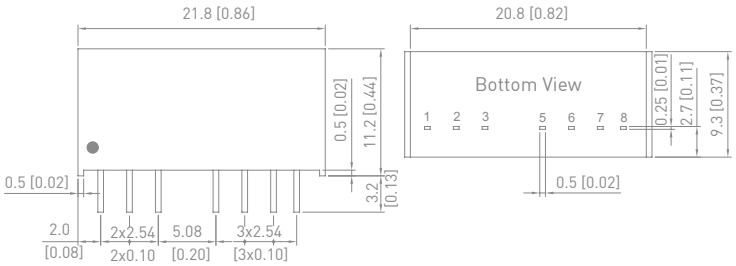
MCW1000 Series | 2W

UL 62368-1 Scheme

- Industry Standard SIP-8 Package
- Wide 2 : 1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1000 VDC
- Wide Operating Temperature Range
- Under-Voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MCW1011	5 (4.5 - 9)	3.3	500	70%
MCW1012		5	400	73%
MCW1013		12	167	75%
MCW1021	12 (9 - 18)	3.3	500	73%
MCW1022		5	400	77%
MCW1023		12	167	80%
MCW1031	24 (18 - 36)	3.3	500	72%
MCW1032		5	400	77%
MCW1033		12	167	81%
MCW1041	48 (36 - 75)	3.3	500	71%
MCW1042		5	400	73%
MCW1043		12	167	79%

Mechanical Dimensions



Pin Connections

Pin	Function
1	-Vin
2	+Vin
3	Remote On/Off
5	NC
6	+Vout
7	-Vout
8	NC

NC= No Connection

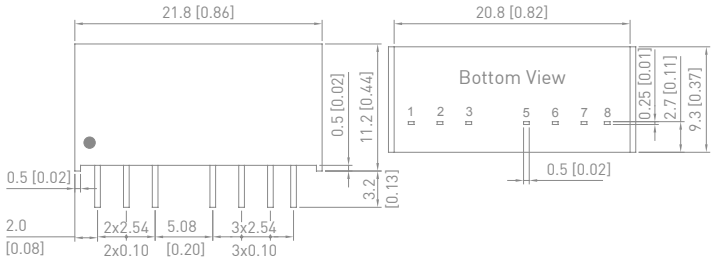
MCWI02 Series | 2W

UL 62368-1 Scheme

- Industrial Standard SIP-8 Package
- Ultra-wide 4 : 1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload and Short Circuit Protection
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MCWI02-12S033	12 (4.5 - 18)	3.3	500	75%
MCWI02-12S05		5	400	80%
MCWI02-12S12		12	167	82%
MCWI02-12S15		15	134	82%
MCWI02-12D05		±5	±200	80%
MCWI02-12D12		±12	±83	82%
MCWI02-12D15		±15	±67	82%
MCWI02-24S033	24 (9 - 36)	3.3	500	75%
MCWI02-24S05		5	400	80%
MCWI02-24S12		12	167	82%
MCWI02-24S15		15	134	82%
MCWI02-24D05		±5	±200	80%
MCWI02-24D12		±12	±83	82%
MCWI02-24D15		±15	±67	82%
MCWI02-48S033	48 (18 - 75)	3.3	500	74%
MCWI02-48S05		5	400	80%
MCWI02-48S12		12	167	82%
MCWI02-48S15		15	134	82%
MCWI02-48D05		±5	±200	80%
MCWI02-48D12		±12	±83	82%
MCWI02-48D15		±15	±67	82%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	Remote On/Off	Remote On/Off
5	NC	NC
6	+Vout	+Vout
7	-Vout	Common
8	NC	-Vout

NC= No Connection

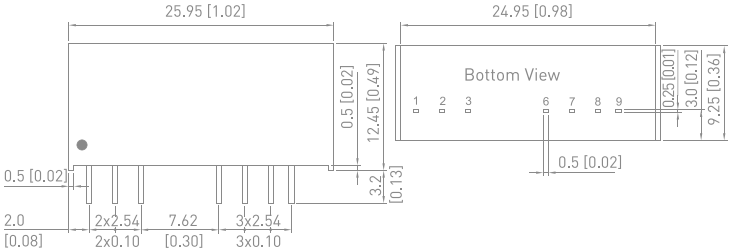
MEW1000 Series 2W

UL 62368-1 Scheme

- High Power Density in SIP-9 Package
- Small Footprint: 26 x 9.2 mm (1.02"x 0.36")
- Ultra-wide 4:1 Input Range
- Fully Regulated Output
- Wide Operating Temperature Range
- Under-Voltage, Overload and Short Circuit Protection
- I/O-Isolation Voltage 1500 VDC
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MEW1021	24 (9 ~ 36)	3.3	500	71%
MEW1022		5	400	76%
MEW1023		12	165	79%
MEW1024		15	133	80%
MEW1025		±5	±200	73%
MEW1026		±12	±83	77%
MEW1027		±15	±67	79%
MEW1031	48 (18 ~ 75)	3.3	500	70%
MEW1032		5	400	72%
MEW1033		12	165	78%
MEW1034		15	133	78%
MEW1035		±5	±200	70%
MEW1036		±12	±83	76%
MEW1037		±15	±67	76%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	+Vin
2	+Vin	+Vin
3	Remote On/Off	Remote On/Off
6	+Vout	+Vout
7	NC	Common
8	NC	NC
9	-Vout	-Vout

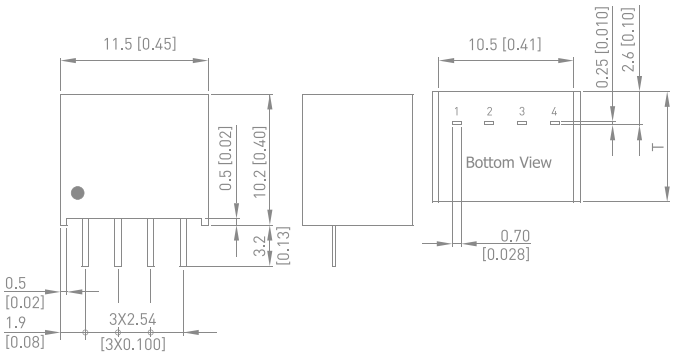
NC= No Connection

MBSU03 Series | 3W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MBSU03-05S05	5 (4.5 - 5.5)	5	600	79%
MBSU03-05S12		12	250	83%
MBSU03-05S15		15	200	84%
MBSU03-12S05	12 (10.8 - 13.2)	5	600	81%
MBSU03-12S12		12	250	85%
MBSU03-12S15		15	200	85%
MBSU03-24S05	24 (21.6 - 26.4)	5	600	82%
MBSU03-24S12		12	250	86%
MBSU03-24S15		15	200	86%

- Industrial Standard SIP-4 Package
- Unregulated Output Voltage
- I/O Isolation 1500VDC
- Wide Operating Temperature Range
- Short Circuit Protection

Mechanical Dimensions



Pin Connections

Pin	Function
1	-Vin
2	+Vin
3	-Vout
4	+Vout

T: 8.6 [0.34] for 5V & 12V Input Models
T: 9.6[0.38] for 24V Input Models

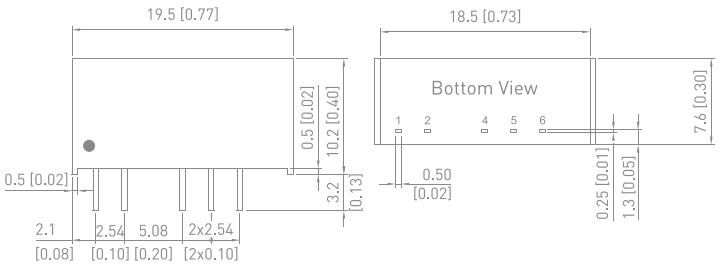
MA03 Series 3W

UL 62368-1 Scheme

- Industrial Standard SIP-7 Package
- Semi-regulated Output Voltage
- Very High Efficiency up to 89%
- High I/O Isolation 1000VDC
- Wide Operating Temperature Range
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MA03-05S05	5 (4.5 ~ 5.5)	5	600	83%
MA03-05S09		9	333	87%
MA03-05S12		12	250	85.5%
MA03-05S15		15	200	87.5%
MA03-12S05	12 (10.8 ~ 13.2)	5	600	84%
MA03-12S09		9	333	87.5%
MA03-12S12		12	250	88%
MA03-12S15		15	200	89%
MA03-24S05	24 (21.6 ~ 26.4)	5	600	82%
MA03-24S09		9	333	85%
MA03-24S12		12	250	85.5%
MA03-24S15		15	200	85%

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	-Vin
3	-Vout
5	No Pin
6	+Vout

NC= No Connection

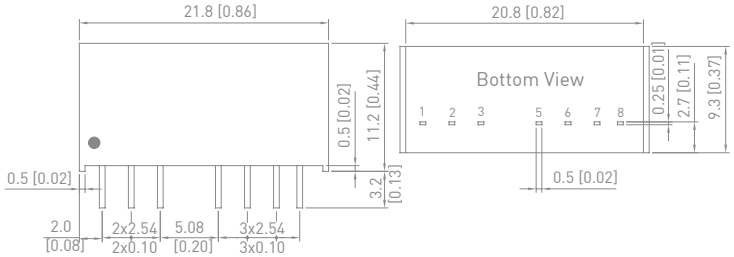
MCW03 Series | 3W

UL 62368-1 Scheme

- Compact SIP-8 Package
- Wide 2 : 1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1600 VDC
- Wide Operating Temperature Range
- Overload and Short Circuit Protection
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MCW03-05S033	5 (4.5 - 9)	3.3	700	71%
MCW03-05S05		5	600	73%
MCW03-05S12		12	250	79%
MCW03-05S15		15	200	79%
MCW03-05D05		±5	±300	74%
MCW03-05D12		±12	±125	79%
MCW03-05D15		±15	±100	79%
MCW03-12S033	12 (9 - 18)	3.3	700	75%
MCW03-12S05		5	600	78%
MCW03-12S12		12	250	83%
MCW03-12S15		15	200	83%
MCW03-12D05		±5	±300	79%
MCW03-12D12		±12	±125	83%
MCW03-12D15		±15	±100	83%
MCW03-24S033	24 (18 - 36)	3.3	700	75%
MCW03-24S05		5	600	78%
MCW03-24S12		12	250	83%
MCW03-24S15		15	200	83%
MCW03-24D05		±5	±300	80%
MCW03-24D12		±12	±125	83%
MCW03-24D15		±15	±100	83%
MCW03-48S033	48 (36 - 75)	3.3	700	75%
MCW03-48S05		5	600	78%
MCW03-48S12		12	250	83%
MCW03-48S15		15	200	83%
MCW03-48D05		±5	±300	80%
MCW03-48D12		±12	±125	83%
MCW03-48D15		±15	±100	83%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	Remote On/Off	Remote On/Off
5	NC	NC
6	+Vout	+Vout
7	-Vout	Common
8	NC	-Vout

NC= No Connection

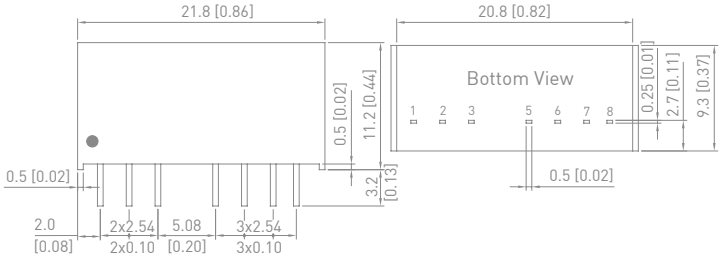
MCWI03 Series | 3W

UL 62368-1 Scheme

- Compact SIP-8 Package
- Ultra-wide 4 : 1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1600 VDC
- Wide Operating Temperature Range
- Overload and Short Circuit Protection
- Remote On/Off Control

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MCWI03-12S033	12 (4.5 - 18)	3.3	700	74%
MCWI03-12S05		5	600	78%
MCWI03-12S12		12	250	80%
MCWI03-12S15		15	200	80%
MCWI03-12D05		±5	±300	80%
MCWI03-12D12		±12	±125	80%
MCWI03-12D15		±15	±100	80%
MCWI03-24S033	24 (9 - 36)	3.3	700	75%
MCWI03-24S05		5	600	80%
MCWI03-24S12		12	250	81%
MCWI03-24S15		15	200	81%
MCWI03-24D05		±5	±300	79%
MCWI03-24D12		±12	±125	80%
MCWI03-24D15		±15	±100	81%
MCWI03-48S033	48 (18 - 75)	3.3	700	74%
MCWI03-48S05		5	600	79%
MCWI03-48S12		12	250	79%
MCWI03-48S15		15	200	79%
MCWI03-48D05		±5	±300	79%
MCWI03-48D12		±12	±125	79%
MCWI03-48D15		±15	±100	80%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	Remote On/Off	Remote On/Off
5	NC	NC
6	+Vout	+Vout
7	-Vout	Common
8	NC	-Vout

NC= No Connection

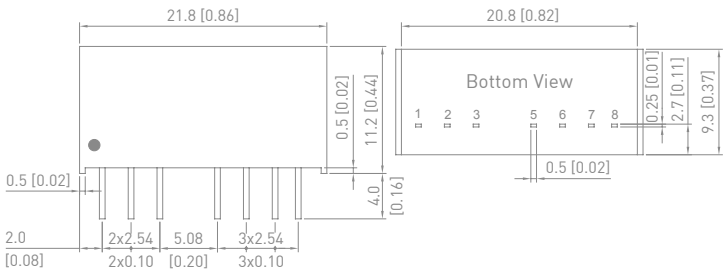
MCW04 Series | 4W

UL 62368-1 Scheme

- Compact SIP-8 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1600 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload and Short Circuit Protection
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1 Safety Approval, CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MCW04-12S05	12 (9 - 18)	5	800	82%
MCW04-12S12		12	333	87%
MCW04-12S15		15	266	86%
MCW04-12S24		24	166	86%
MCW04-12D12		±12	±166	85%
MCW04-12D15		±15	±133	86%
MCW04-24S05	24 (18 - 36)	5	800	81%
MCW04-24S12		12	333	86%
MCW04-24S15		15	266	86%
MCW04-24S24		24	166	86%
MCW04-24D12		±12	±166	86%
MCW04-24D15		±15	±133	85%
MCW04-48S05	48 (36 - 75)	5	800	80%
MCW04-48S12		12	333	85%
MCW04-48S15		15	266	83%
MCW04-48S24		24	166	86%
MCW04-48D12		±12	±166	84%
MCW04-48D15		±15	±133	85%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	Remote On/Off	Remote On/Off
5	NC	NC
6	+Vout	+Vout
7	-Vout	Common
8	NC	-Vout

NC= No Connection

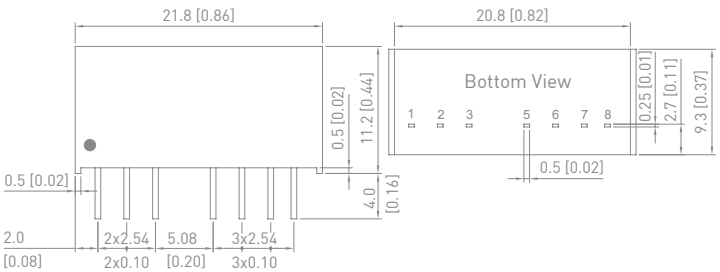
MCWI04 Series | 4W

UL 62368-1 Scheme

- Compact SIP-8 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1600 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload and Short Circuit Protection
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1 Safety Approval, CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MCWI04-24S05	24 (9 - 36)	5	800	79
MCWI04-24S12		12	333	83
MCWI04-24S15		15	266	83
MCWI04-24S24		24	166	83
MCWI04-24D12		±12	±166	83
MCWI04-24D15		±15	±133	83
MCWI04-48S05	48 (18 - 75)	5	800	78
MCWI04-48S12		12	333	82
MCWI04-48S15		15	266	82
MCWI04-48S24		24	166	82
MCWI04-48D12		±12	±166	82
MCWI04-48D15		±15	±133	82

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	Remote On/Off	Remote On/Off
5	NC	NC
6	+Vout	+Vout
7	-Vout	Common
8	NC	-Vout

NC= No Connection

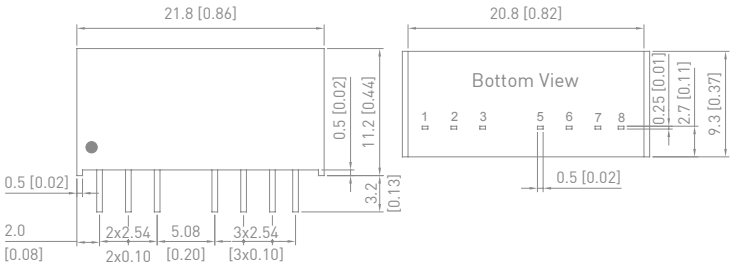
MCWI05 Series | 5W

UL 62368-1 Scheme

- Smallest Encapsulated 5W Converter
- Ultra-compact SIP-8 Package
- Ultra-wide 4 : 1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-Voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MCWI05-12S033	12 (4.5 - 18)	3.3	1,075	76%
MCWI05-12S05		5	1,000	81%
MCWI05-12S12		12	417	83%
MCWI05-12S15		15	334	83%
MCWI05-12S24		24	209	82%
MCWI05-12D12		±12	±209	81%
MCWI05-12D15		±15	±167	82%
MCWI05-24S033	24 (9 - 36)	3.3	1,075	76%
MCWI05-24S05		5	1,000	81%
MCWI05-24S12		12	417	83%
MCWI05-24S15		15	334	84%
MCWI05-24S24		24	209	83%
MCWI05-24D12		±12	±209	82%
MCWI05-24D15		±15	±167	82%
MCWI05-48S033	48 (18 - 75)	3.3	1,075	76%
MCWI05-48S05		5	1,000	80%
MCWI05-48S12		12	417	83%
MCWI05-48S15		15	334	84%
MCWI05-48S24		24	209	82%
MCWI05-48D12		±12	±209	82%
MCWI05-48D15		±15	±167	83%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	Remote On/Off	Remote On/Off
5	NC	NC
6	+Vout	+Vout
7	-Vout	Common
8	NC	-Vout

NC= No Connection

NEW

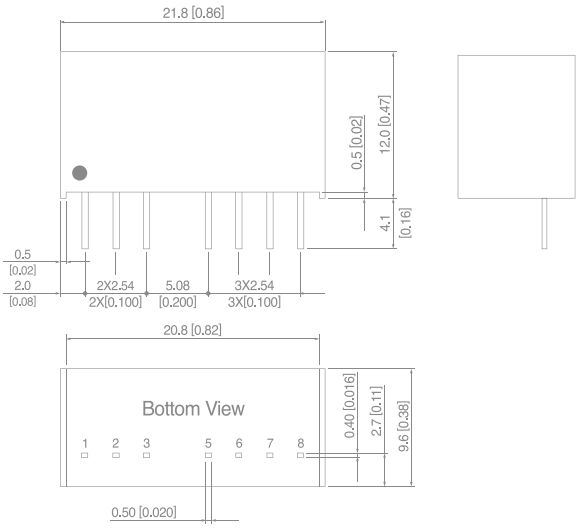
MCWI08 Series | 8W

UL 62368-1 Scheme

- Smallest Encapsulated 8W Converter
- Industrial Standard SIP-8 Package
- Ultra-wide 4 : 1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Very Low No Load Power Consumption
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MCWI08-12S05	12 (4.5 - 18)	5	1600	84%
MCWI08-12S12		12	665	86%
MCWI08-12S15		15	535	86%
MCWI08-12S24		24	335	86%
MCWI08-12D12		±12	±335	86%
MCWI08-12D15		±15	±265	86%
MCWI08-24S05	24 (9 - 36)	5	1600	84%
MCWI08-24S12		12	665	86%
MCWI08-24S15		15	535	86%
MCWI08-24S24		24	335	86%
MCWI08-24D12		±12	±335	86%
MCWI08-24D15		±15	±265	86%
MCWI08-48S05	48 (18 - 75)	5	1600	84%
MCWI08-48S12		12	665	86%
MCWI08-48S15		15	535	86%
MCWI08-48S24		24	335	86%
MCWI08-48D12		±12	±335	86%
MCWI08-48D15		±15	±265	86%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	Remote On/Off	Remote On/Off
5	NC	NC
6	+Vout	+Vout
7	-Vout	Common
8	NC	-Vout

NC : No Connection

NEW

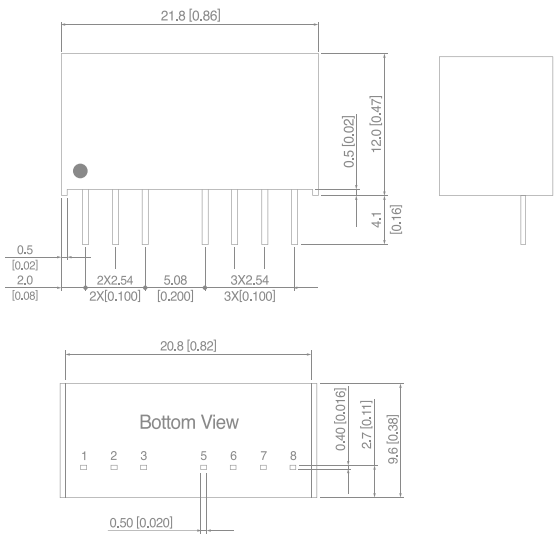
MCWI10 Series | 10W

UL 62368-1 Scheme

- Smallest Encapsulated 10W Converter
- Industrial Standard SIP-8 Package
- Ultra-high Power Density 65W/in³
- Ultra-wide 4 : 1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Very Low No Load Power Consumption
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MCWI10-12S051	12 (4.5 - 18)	5.1	2000	89%
MCWI10-12S12		12	833	89%
MCWI10-12S15		15	666	89%
MCWI10-12S24		24	416	89%
MCWI10-12D12		±12	±416	88%
MCWI10-12D15		±15	±333	89%
MCWI10-24S051	24 (9 - 36)	5.1	2000	88%
MCWI10-24S12		12	833	89%
MCWI10-24S15		15	666	89%
MCWI10-24S24		24	416	88%
MCWI10-24D12		±12	±416	88%
MCWI10-24D15		±15	±333	88%
MCWI10-48S051	48 (18 - 75)	5.1	2000	88%
MCWI10-48S12		12	833	89%
MCWI10-48S15		15	666	89%
MCWI10-48S24		24	416	89%
MCWI10-48D12		±12	±416	89%
MCWI10-48D15		±15	±333	89%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	Remote On/Off	Remote On/Off
5	NC	NC
6	+Vout	+Vout
7	-Vout	Common
8	NC	-Vout

NC : No Connection

MSLU100 Series | 1W

UL 62368-1 Scheme

- Industrial SMD Package
- Unregulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Cleaning-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process

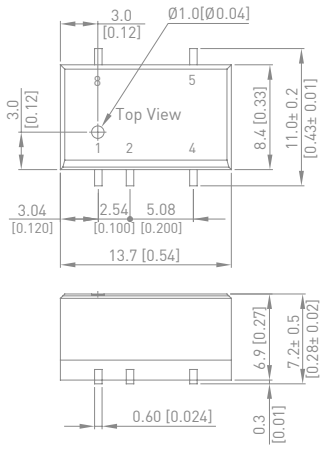
According to IPC/JEDEC J-STD-020D.1

- Tape & Reel Package Available
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

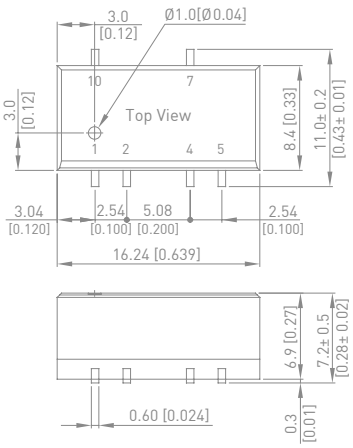
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSLU101	5 (4.5 - 5.5)	3.3	300	73%
MSLU102		5	200	78%
MSLU103		9	110	78%
MSLU104		12	84	78%
MSLU105		15	67	79%
MSLU106		±5	±100	74%
MSLU108		±12	±42	78%
MSLU109		±15	±33	78%
MSLU111	12 (10.8 - 13.2)	3.3	300	74%
MSLU112		5	200	76%
MSLU113		9	110	78%
MSLU114		12	84	79%
MSLU115		15	67	80%
MSLU116		±5	±100	74%
MSLU118		±12	±42	78%
MSLU119		±15	±33	79%
MSLU154	15 (13.5 - 16.5)	12	84	78%
MSLU155		15	67	78%
MSLU121	24 (21.6 - 26.4)	3.3	300	72%
MSLU122		5	200	78%
MSLU123		9	110	77%
MSLU124		12	84	77%
MSLU125		15	67	79%
MSLU126		±5	±100	73%
MSLU128		±12	±42	78%
MSLU129		±15	±33	78%

Mechanical Dimensions

Single



Dual



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	No Pin	No Pin
4	-Vout	Common
5	+Vout	-Vout
6	No Pin	No Pin
7	No Pin	+Vout
8	NA	No Pin
9	---	No Pin
10	---	NA

NA : Not Available for Electrical Connection

MSLU300 Series | 1W

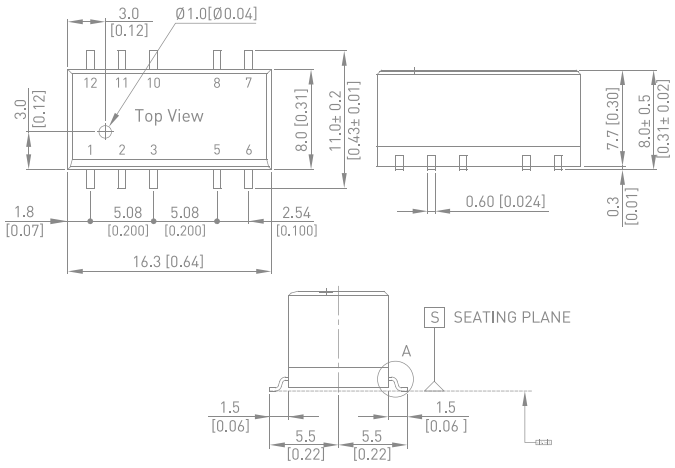
- Industrial SMD Package
- Unregulated Output Voltage
- I/O Isolation 3000 VDC
- Wide Operating Temperature Range
- Cleaning-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process

According to IPC/JEDEC J-STD-020D.1

- Tape & Reel Package Available

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSLU301	5 (4.5 - 5.5)	3.3	260	72%
MSLU302		5	200	75%
MSLU304		12	84	79%
MSLU305		15	67	80%
MSLU306		±5	±100	75%
MSLU308		±12	±42	79%
MSLU309		±15	±34	80%
MSLU311	12 (10.8 - 13.2)	3.3	260	73%
MSLU312		5	200	76%
MSLU314		12	84	80%
MSLU315		15	67	81%
MSLU316		±5	±100	76%
MSLU318		±12	±42	80%
MSLU319		±15	±34	80%
MSLU321	24 (21.6 - 26.4)	3.3	260	70%
MSLU322		5	200	73%
MSLU324		12	84	79%
MSLU325		15	67	79%
MSLU326		±5	±100	73%
MSLU328		±12	±42	79%
MSLU329		±15	±34	79%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	NA	NA
5	-Vout	Common
6	NA	-Vout
7	NA	NA
8	+Vout	+Vout
10,11,12	NA	NA

NA : Not Available for Electrical Connection

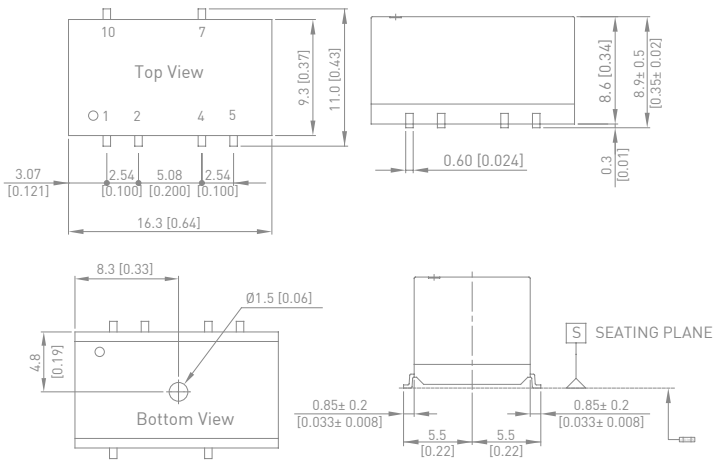
MSPU01H Series | 1W

UL 62368-1 Scheme

- Industrial SMD Package
- Unregulated Output Voltage
- I/O Isolation 3000 VDC
- Wide Operating Temperature Range
- Overload and Short Circuit Protection
- Cleaning-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process According to IPC/JEDEC J-STD-020D.1
- Tape & Reel Package Available
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSPU01-033S033H	3.3 (2.97 - 3.63)	3.3	300	77%
MSPU01-033S05H		5	200	79%
MSPU01-033S12H		12	84	81%
MSPU01-033S15H		15	67	80%
MSPU01-033D05H		±5	±100	79%
MSPU01-033D12H		±12	±42	81%
MSPU01-033D15H		±15	±33	80%
MSPU01-05S033H	5 (4.5 - 5.5)	3.3	300	79%
MSPU01-05S05H		5	200	82%
MSPU01-05S12H		12	84	84%
MSPU01-05S15H		15	67	85%
MSPU01-05D05H		±5	±100	82%
MSPU01-05D12H		±12	±42	84%
MSPU01-05D15H		±15	±33	84%
MSPU01-12S033H	12 (10.8 - 13.2)	3.3	300	78%
MSPU01-12S05H		5	200	81%
MSPU01-12S12H		12	84	83%
MSPU01-12S15H		15	67	83%
MSPU01-12D05H		±5	±100	82%
MSPU01-12D12H		±12	±42	83%
MSPU01-12D15H		±15	±33	83%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	No Pin	No Pin
4	-Vout	Common
5	NC	-Vout
6	No Pin	No Pin
7	+Vout	+Vout
8	No Pin	No Pin
9	No Pin	No Pin
10	NC	NC

NC: No Connection

MSCW01 Series | 1W

UL 62368-1 Scheme

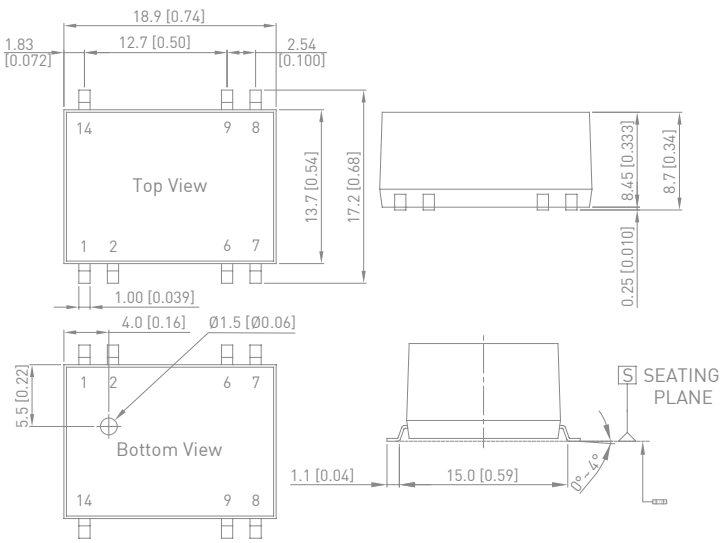
- Industrial SMD Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload and Short Circuit Protection
- Remote On/Off Function
- Water-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process

According to IPC/JEDEC J-STD-020D.1

- Tape & Reel Package Available
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSCW01-05S05	5 (4.5 - 9)	5	200	78%
MSCW01-05S12		12	83	79%
MSCW01-05S15		15	67	81%
MSCW01-05D12		±12	±42	79%
MSCW01-05D15		±15	±33	80%
MSCW01-12S05	12 (9 - 18)	5	200	79%
MSCW01-12S12		12	83	79%
MSCW01-12S15		15	67	82%
MSCW01-12D12		±12	±42	81%
MSCW01-12D15		±15	±33	80%
MSCW01-24S05	24 (18 - 36)	5	200	79%
MSCW01-24S12		12	83	82%
MSCW01-24S15		15	67	82%
MSCW01-24D12		±12	±42	82%
MSCW01-24D15		±15	±33	82%
MSCW01-48S05	48 (36 - 75)	5	200	79%
MSCW01-48S12		12	83	80%
MSCW01-48S15		15	67	80%
MSCW01-48D12		±12	±42	81%
MSCW01-48D15		±15	±33	81%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	Remote On/Off	Remote On/Off
6	NC	Common
7	NC	-Vout
8	+Vout	+Vout
9	-Vout	Common
14	+Vin	+Vin

NC= No Connection

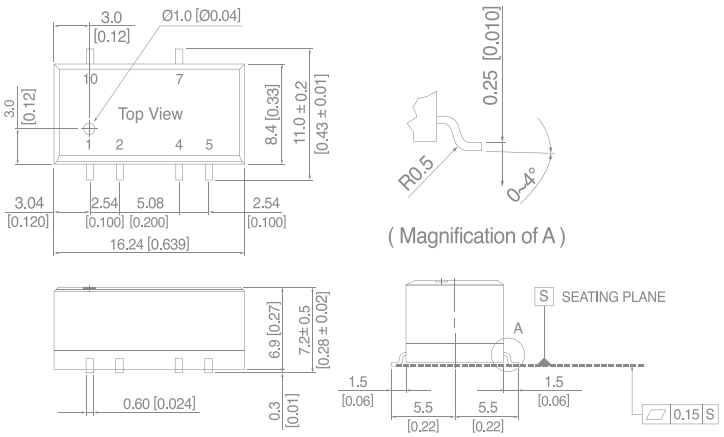
NEW

MSU01 Series | 1W

- Compact Industrial SMD Package
- Unregulated Output Voltage
- I/O Isolation 1500 VDC
- Efficiency up to 91%
- Short Circuit Protection (Hiccup Mode)
- Wide Operating Temperature Range
- Cleaning-washable Process Available (optional)
- Qualified for Lead-free Reflow Solder Process according to IPC/JEDEC J-STD-020D.1

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSU01-05S033	5 (4.5 - 5.5)	3.3	300	85%
MSU01-05S05		5	200	88%
MSU01-05S12		12	84	90%
MSU01-05S15		15	67	90%
MSU01-05S24		24	42	90%
MSU01-05D05		±5	±100	87%
MSU01-05D12		±12	±42	90%
MSU01-05D15		±15	±33	91%
MSU01-12S033	12 (10.8 - 13.2)	3.3	300	84%
MSU01-12S05		5	200	87%
MSU01-12S12		12	84	89%
MSU01-12S15		15	67	89%
MSU01-12S24		24	42	88%
MSU01-12D05		±5	±100	88%
MSU01-12D12		±12	±42	90%
MSU01-12D15		±15	±33	90%
MSU01-24S033	24 (21.6 - 26.4)	3.3	300	81%
MSU01-24S05		5	200	84%
MSU01-24S12		12	84	85%
MSU01-24S15		15	67	86%
MSU01-24S24		24	42	85%
MSU01-24D05		±5	±100	82%
MSU01-24D12		±12	±42	85%
MSU01-24D15		±15	±33	85%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	No Pin	No Pin
4	-Vout	Common
5	+Vout	-Vout
6	No Pin	No Pin
7	No Pin	+Vout
8	NA	No Pin
9	---	No Pin
10	---	NA

NA = Not Available for Electrical Connection

MSLU400 Series | 2W

- Industrial SMD Package
- Unregulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Cleaning-washable Process Available (option)
- Qualified for Lead-free Reflow Solder Process

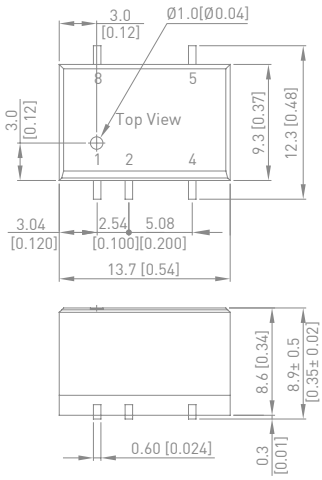
According to IPC/JEDEC J-STD-020D.1

- Tape & Reel Package Available

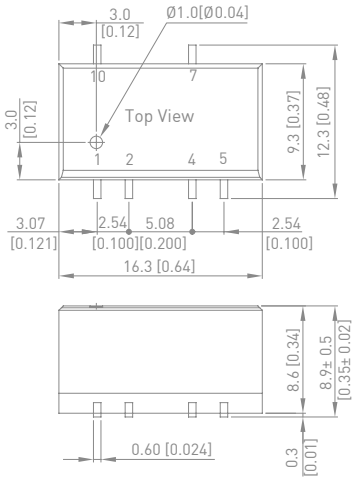
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSLU401	5 (4.5 ~ 5.5)	3.3	500	70%
MSLU402		5	400	73%
MSLU404		12	165	77%
MSLU406		±5	±200	74%
MSLU408		±12	±83	76%
MSLU409		±15	±66	76%
MSLU411	12 (10.8 ~ 13.2)	3.3	500	72%
MSLU412		5	400	75%
MSLU414		12	165	79%
MSLU418		±12	±83	80%
MSLU419		±15	±66	80%
MSLU421	24 (21.6 ~ 26.4)	3.3	500	72%
MSLU422		5	400	75%
MSLU424		12	165	79%
MSLU428		±12	±83	79%
MSLU429		±15	±66	79%

Mechanical Dimensions

Single



Dual



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
4	-Vout	Common
5	+Vout	-Vout
7	No Pin	+Vout
8	NA	No Pin
10	No Pin	NA

NA : Not Available for Electrical Connection

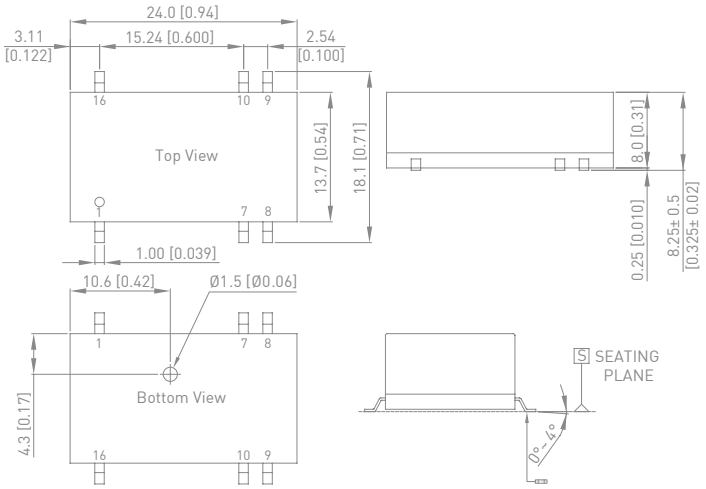
MSDW1000 Series | 2W

UL 60950-1 Scheme RoHS Compliant

- Industrial SMD Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Under-voltage and Short Circuit Protection
- Cleaning-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process According to IPC/JEDEC J-STD-020D.1
- Tape & Reel Package Available
- UL/cUL/IEC/EN 60950-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSDW1011	5 (4.5 - 9)	3.3	500	70%
MSDW1012		5	400	73%
MSDW1013		12	167	75%
MSDW1014		15	134	73%
MSDW1015		±5	±200	64%
MSDW1016		±12	±83	69%
MSDW1017		±15	±67	71%
MSDW1021	12 (9 - 18)	3.3	500	73%
MSDW1022		5	400	77%
MSDW1023		12	167	80%
MSDW1024		15	134	80%
MSDW1025		±5	±200	73%
MSDW1026		±12	±83	78%
MSDW1027		±15	±67	78%
MSDW1031	24 (18 - 36)	3.3	500	72%
MSDW1032		5	400	77%
MSDW1033		12	167	80%
MSDW1034		15	134	81%
MSDW1035		±5	±200	74%
MSDW1036		±12	±83	78%
MSDW1037		±15	±67	80%
MSDW1041	48 (36 - 75)	3.3	500	71%
MSDW1042		5	400	73%
MSDW1043		12	167	79%
MSDW1044		15	134	79%
MSDW1045		±5	±200	71%
MSDW1046		±12	±83	77%
MSDW1047		±15	±67	77%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC: No Connection

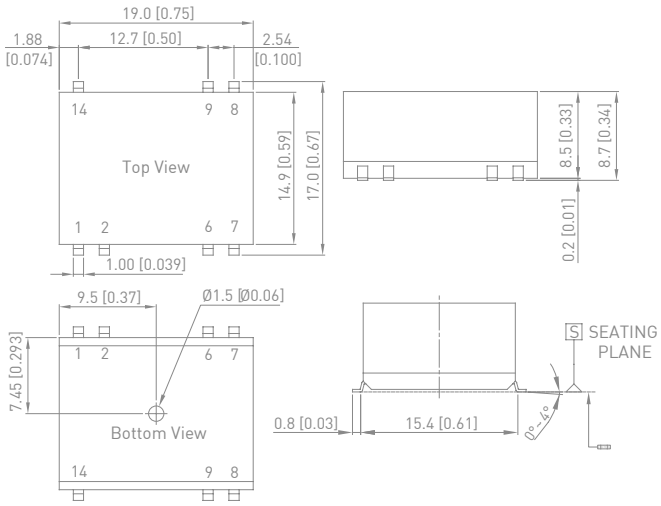
MSCWI02 Series | 2W

UL 62368-1 Scheme RoHS Compliant

- Very Compact SMD Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- EMI Emission EN55032 Class A Approved
- Cleaning-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process According to IPC/JEDEC J-STD-020D.1
- Tape & Reel Package Available
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSCWI02-05S05	5 (4.5 - 12)	5	400	80%
MSCWI02-05S12		12	167	84%
MSCWI02-05S15		15	134	83%
MSCWI02-05S24		24	83	84%
MSCWI02-05D12		±12	±83	83%
MSCWI02-05D15		±15	±67	82%
MSCWI02-24S05	24 (9 - 36)	5	400	80%
MSCWI02-24S12		12	167	84%
MSCWI02-24S15		15	134	85%
MSCWI02-24S24		24	83	85%
MSCWI02-24D12		±12	±83	83%
MSCWI02-24D15		±15	±67	83%
MSCWI02-48S05	48 (18 - 75)	5	400	78%
MSCWI02-48S12		12	167	82%
MSCWI02-48S15		15	134	83%
MSCWI02-48S24		24	83	84%
MSCWI02-48D12		±12	±83	82%
MSCWI02-48D15		±15	±67	82%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	Remote On/Off	Remote On/Off
6	NC	Common
7	NC	-Vout
8	+Vout	+Vout
9	-Vout	Common
14	+Vin	+Vin

NC= No Connection

NEW

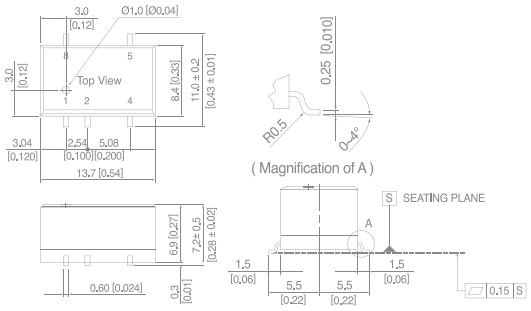
MSU02 Series | 2W

- Compact Industrial SMD Package
- Unregulated Output Voltage
- I/O Isolation 1500 VDC
- Efficiency up to 91%
- Short Circuit Protection (Hiccup Mode)
- Wide Operating Temperature Range
- Cleaning-washable Process Available (optional)
- Qualified for Lead-free Reflow Solder Process according to IPC/JEDEC J-STD-020D.1

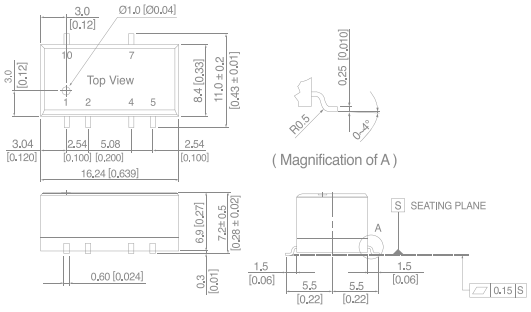
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSU02-05S033	5 (4.5 - 5.5)	3.3	600	84%
MSU02-05S05		5	400	88%
MSU02-05S12		12	167	91%
MSU02-05S15		15	134	91%
MSU02-05S24		24	83	90%
MSU02-05D05		±5	±200	87%
MSU02-05D12		±12	±83	91%
MSU02-05D15		±15	±67	91%
MSU02-12S033	12 (10.8 - 13.2)	3.3	600	83%
MSU02-12S05		5	400	86%
MSU02-12S12		12	167	90%
MSU02-12S15		15	134	91%
MSU02-12S24		24	83	89%
MSU02-12D05		±5	±200	88%
MSU02-12D12		±12	±83	90%
MSU02-12D15		±15	±67	91%
MSU02-24S033	24 (21.6 - 26.4)	3.3	600	84%
MSU02-24S05		5	400	87%
MSU02-24S12		12	167	90%
MSU02-24S15		15	134	90%
MSU02-24S24		24	83	90%
MSU02-24D05		±5	±200	87%
MSU02-24D12		±12	±83	90%
MSU01-24D15		±15	±33	85%

Mechanical Dimensions

Mechanical Dimensions (Single Output)



Mechanical Dimensions (Dual Output)



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	No Pin	No Pin
4	-Vout	Common
5	+Vout	-Vout
6	No Pin	No Pin
7	No Pin	+Vout
8	NA	No Pin
9	---	No Pin
10	---	NA

NA = Not Available for Electrical Connection

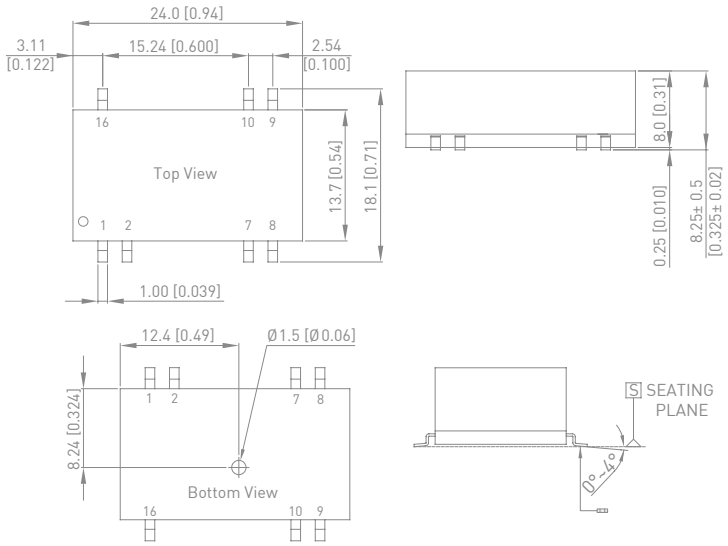
MSDWI03 Series | 3W

UL 60950-1 Scheme

- Compact SMD Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- Cleaning-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process
- According to IPC/JEDECJ-STD-020D.1
- Tape & Reel Package Available
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSDWI03-24S033	24 (9 ~ 36)	3.3	600	75%
MSDWI03-24S05		5	600	78%
MSDWI03-24S12		12	250	80%
MSDWI03-24S15		15	200	80%
MSDWI03-24S24		24	125	80%
MSDWI03-24D05		±5	±300	77%
MSDWI03-24D12		±12	±125	80%
MSDWI03-24D15		±15	±100	80%
MSDWI03-48S033	48 (18 ~ 75)	3.3	600	75%
MSDWI03-48S05		5	600	78%
MSDWI03-48S12		12	250	80%
MSDWI03-48S15		15	200	80%
MSDWI03-48S24		24	125	80%
MSDWI03-48D05		±5	±300	77%
MSDWI03-48D12		±12	±125	80%
MSDWI03-48D15		±15	±100	80%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	Remote On/Off	Remote On/Off
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

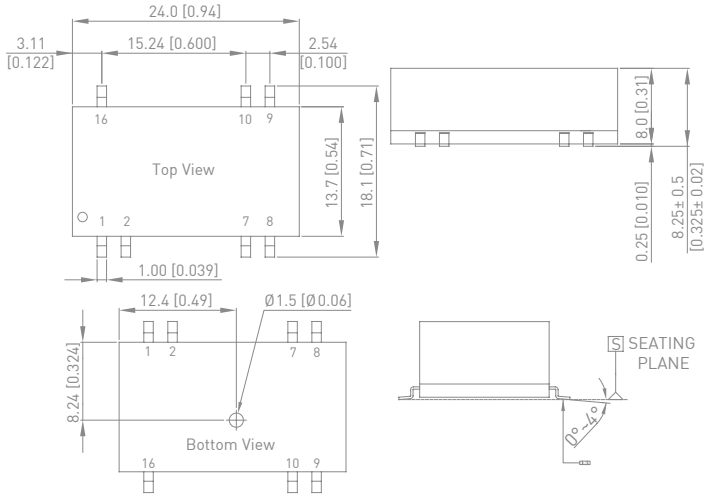
NC: No Connection

MSCWI03 Series | 3W

- Very Compact SMD Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- EMI Emission EN 55032 Class A Approved
- Cleaning-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process According to IPC/JEDEC J-STD-020D.1
- Tape & Reel Package Available
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSCWI03-05S05	5 (4.5 - 12)	5	600	81%
MSCWI03-05S12		12	250	84%
MSCWI03-05S15		15	200	84%
MSCWI03-05S24		24	125	84%
MSCWI03-05D12		±12	±125	83%
MSCWI03-05D15		±15	±100	83%
MSCWI03-24S05	24 (9 - 36)	5	600	80%
MSCWI03-24S12		12	250	85%
MSCWI03-24S15		15	200	85%
MSCWI03-24S24		24	125	85%
MSCWI03-24D12		±12	±125	84%
MSCWI03-24D15		±15	±100	84%
MSCWI03-48S05	48 (18 - 75)	5	600	80%
MSCWI03-48S12		12	250	84%
MSCWI03-48S15		15	200	84%
MSCWI03-48S24		24	125	85%
MSCWI03-48D12		±12	±125	83%
MSCWI03-48D15		±15	±100	82%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	Remote On/Off	Remote On/Off
6	NC	Common
7	NC	-Vout
8	+Vout	+Vout
9	-Vout	Common
14	+Vin	+Vin

NC= No Connection

MSGWI06 Series | 6W

UL 62368-1 Scheme

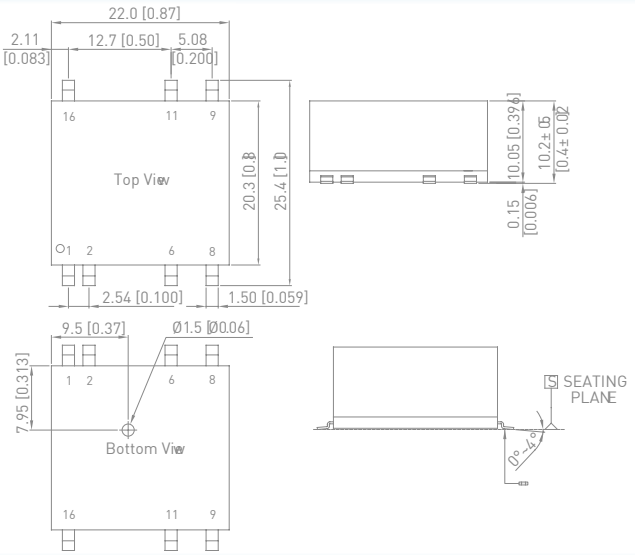
- Industrial SMD Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- Cleaning-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process

According to IPC/JEDEC J-STD-020D.1

- Tape & Reel Package Available
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSGWI06-24S033	24 (9 - 36)	3.3	1,450	76%
MSGWI06-24S05		5	1,200	79%
MSGWI06-24S12		12	500	83%
MSGWI06-24S15		15	400	83%
MSGWI06-24S24		24	250	83%
MSGWI06-24D05		±5	±600	82%
MSGWI06-24D12		±12	±250	83%
MSGWI06-24D15		±15	±200	83%
MSGWI06-48S033	48 (18 - 75)	3.3	1,450	76%
MSGWI06-48S05		5	1,200	79%
MSGWI06-48S12		12	500	83%
MSGWI06-48S15		15	400	83%
MSGWI06-48S24		24	250	83%
MSGWI06-48D05		±5	±600	82%
MSGWI06-48D12		±12	±250	83%
MSGWI06-48D15		±15	±200	83%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2	-Vin	-Vin
6	NC	Common
8	NC	-Vout
9	+Vout	+Vout
11	-Vout	Common
16	+Vin	+Vin

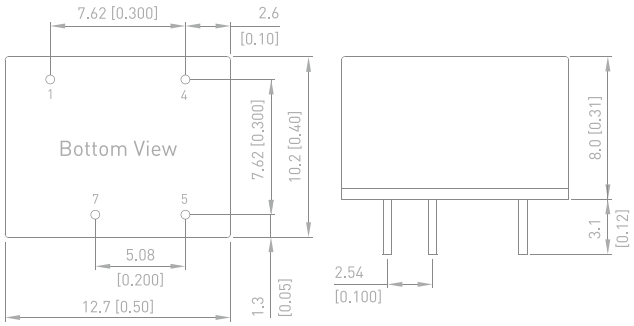
NC: No Connection

MFSU01 Series | 1W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MFSU01-05S05	5 (4.5 - 5.5)	5	200	80%
MFSU01-05S12		12	84	82%
MFSU01-05S15		15	67	83%
MFSU01-12S05	12 (10.8 - 13.2)	5	200	79%
MFSU01-12S12		12	84	81%
MFSU01-12S15		15	67	82%
MFSU01-24S05	24 (21.6 - 26.4)	5	200	78%
MFSU01-24S12		12	84	80%
MFSU01-24S15		15	67	81%

- Industrial Standard DIP-8 Package
- Unregulated Output Voltage
- I/O Isolation 1500VDC
- Wide Operating Temperature Range
- Short Circuit Protection

Mechanical Dimensions



Pin Connections

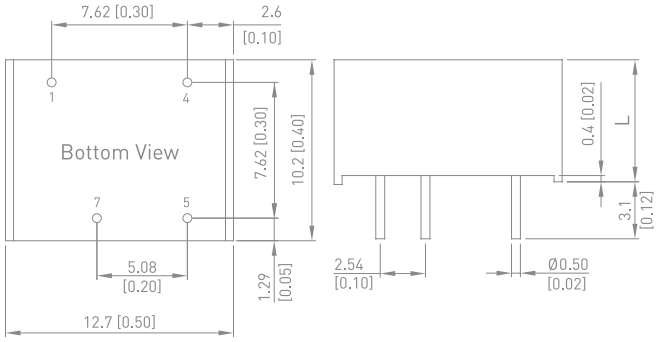
Pin	Function
1	-Vin
4	+Vin
5	+Vout
7	-Vout

MFU100 Series | 1W

- Industrial Standard DIP-8 Package
- I/O Isolation 3000 VDC
- Wide Operating Temperature Range
- UL/cUL/IEC/EN 60950-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MFU102	5 (4.5 ~ 5.5)	5	200	69%
MFU103		9	110	76%
MFU104		12	84	77%
MFU105		15	67	78%
MFU112	12 (10.8 ~ 13.2)	5	200	71%
MFU113		9	110	77%
MFU114		12	84	79%
MFU115		15	67	79%
MFU122	24 (21.6 ~ 26.4)	5	200	70%
MFU123		9	110	76%
MFU124		12	84	79%
MFU125		15	67	79%

Mechanical Dimensions



Pin Connections

Pin	Function
1	-Vin
4	+Vin
5	+Vout
7	-Vout

L:7.0 [0.28] for 5V & 12V Input Models
L:8.0 [0.31] for 24V Input Models

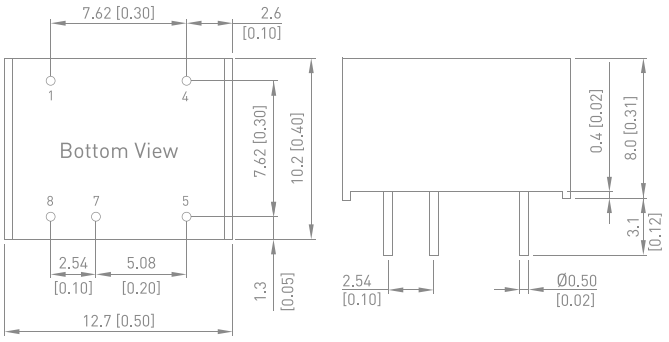
MFPU01H Series | 1W

UL 62368-1 Scheme

- Industrial Standard DIP-8 Package
- Unregulated Output Voltage
- I/O Isolation 3000VDC
- Wide Operating Temperature Range
- Overload and Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MFPU01-033S033H	3.3 (2.97 - 3.63)	3.3	300	75%
MFPU01-033S05H		5	200	79%
MFPU01-033S12H		12	84	80%
MFPU01-033S15H		15	67	81%
MFPU01-033D05H		±5	±100	78%
MFPU01-033D12H		±12	±42	80%
MFPU01-033D15H		±15	±33	81%
MFPU01-05S033H	5 (4.5 - 5.5)	3.3	300	77%
MFPU01-05S05H		5	200	80%
MFPU01-05S12H		12	84	82%
MFPU01-05S15H		15	67	83%
MFPU01-05D05H		±5	±100	80%
MFPU01-05D12H		±12	±42	83%
MFPU01-05D15H		±15	±33	83%
MFPU01-12S033H	12 (10.8 - 13.2)	3.3	300	77%
MFPU01-12S05H		5	200	79%
MFPU01-12S12H		12	84	81%
MFPU01-12S15H		15	67	82%
MFPU01-12D05H		±5	±100	80%
MFPU01-12D12H		±12	±42	82%
MFPU01-12D15H		±15	±33	82%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
4	+Vin	+Vin
5	+Vout	+Vout
7	-Vout	Common
8	No Pin	-Vout

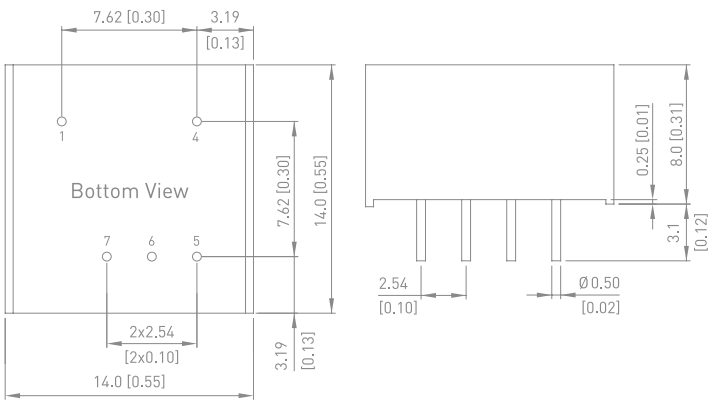
MFW02 Series | 2W

UL 62368-1 Scheme

- Smallest Encapsulated 2W Converter
- Ultra-compact DIP-8 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MFW02-05S033	5 (4.5 - 10)	3.3	400	79%
MFW02-05S05		5	400	81%
MFW02-05S12		12	167	85%
MFW02-05S15		15	134	87%
MFW02-05D05		±5	±200	83%
MFW02-05D12		±12	±83	85%
MFW02-05D15		±15	±67	85%
MFW02-12S033	12 (9 - 18)	3.3	400	80%
MFW02-12S05		5	400	83%
MFW02-12S12		12	167	87%
MFW02-12S15		15	134	87%
MFW02-12D05		±5	±200	84%
MFW02-12D12		±12	±83	86%
MFW02-12D15		±15	±67	86%
MFW02-24S033	24 (18 - 36)	3.3	400	79%
MFW02-24S05		5	400	84%
MFW02-24S12		12	167	86%
MFW02-24S15		15	134	87%
MFW02-24D05		±5	±200	84%
MFW02-24D12		±12	±83	86%
MFW02-24D15		±15	±67	86%
MFW02-48S033	48 (36 - 75)	3.3	400	79%
MFW02-48S05		5	400	83%
MFW02-48S12		12	167	85%
MFW02-48S15		15	134	86%
MFW02-48D05		±5	±200	82%
MFW02-48D12		±12	±83	84%
MFW02-48D15		±15	±67	84%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
4	+Vin	+Vin
5	+Vout	+Vout
6	No Pin	Common
7	-Vout	-Vout

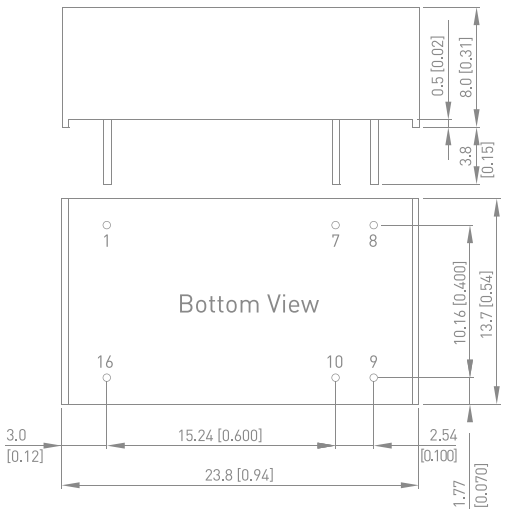
MDW1000 Series 2W

UL 62368-1 Scheme

- Industrial Standard DIP-16 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Short Circuit Protection
- UL/cUL/IEC/EN 60950-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDW1011	5 (4.5 ~ 9)	3.3	500	70%
MDW1012		5	400	73%
MDW1013		12	167	75%
MDW1014		15	134	73%
MDW1015		±5	±200	64%
MDW1016		±12	±83	69%
MDW1017		±15	±67	71%
MDW1021	12 (9 ~ 18)	3.3	500	73%
MDW1022		5	400	77%
MDW1023		12	167	80%
MDW1024		15	134	80%
MDW1025		±5	±200	73%
MDW1026		±12	±83	78%
MDW1027		±15	±67	78%
MDW1031	24 (18 ~ 36)	3.3	500	72%
MDW1032		5	400	77%
MDW1033		12	167	80%
MDW1034		15	134	81%
MDW1035		±5	±200	74%
MDW1036		±12	±83	78%
MDW1037		±15	±67	80%
MDW1041	48 (36 ~ 75)	3.3	500	71%
MDW1042		5	400	73%
MDW1043		12	167	79%
MDW1044		15	134	79%
MDW1045		±5	±200	71%
MDW1046		±12	±83	77%
MDW1047		±15	±67	77%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC: No Connection

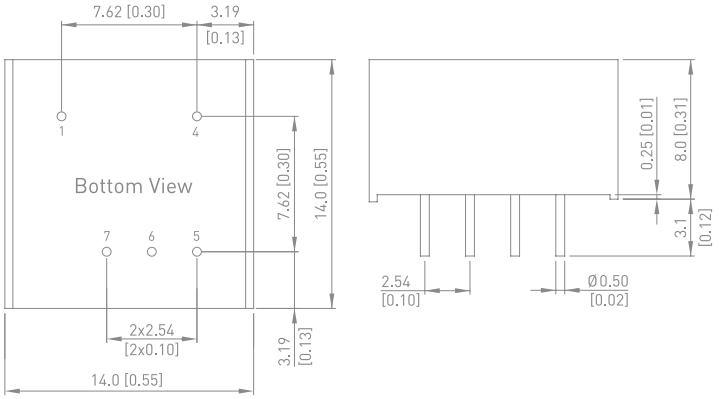
MFW03 Series | 3W

UL 62368-1 Scheme

- Smallest Encapsulated 3W Converter
- Ultra-compact DIP-8 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MFW03-05S033	5 (4.5 - 10)	3.3	600	79%
MFW03-05S05		5	600	81%
MFW03-05S12		12	250	85%
MFW03-05S15		15	200	85%
MFW03-05D05		±5	±300	82%
MFW03-05D12		±12	±125	84%
MFW03-05D15		±15	±100	85%
MFW03-12S033	12 (9 - 18)	3.3	600	80%
MFW03-12S05		5	600	83%
MFW03-12S12		12	250	87%
MFW03-12S15		15	200	87%
MFW03-12D05		±5	±300	84%
MFW03-12D12		±12	±125	86%
MFW03-12D15		±15	±100	87%
MFW03-24S033	24 (18 - 36)	3.3	600	80%
MFW03-24S05		5	600	83%
MFW03-24S12		12	250	87%
MFW03-24S15		15	200	87%
MFW03-24D05		±5	±300	84%
MFW03-24D12		±12	±125	86%
MFW03-24D15		±15	±100	87%
MFW03-48S033	48 (36 - 75)	3.3	600	79%
MFW03-48S05		5	600	82%
MFW03-48S12		12	250	86%
MFW03-48S15		15	200	86%
MFW03-48D05		±5	±300	82%
MFW03-48D12		±12	±125	85%
MFW03-48D15		±15	±100	85%

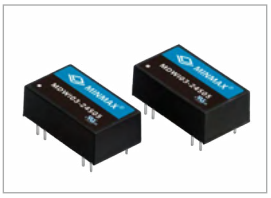
Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
4	+Vin	+Vin
5	+Vout	+Vout
6	No Pin	Common
7	-Vout	-Vout

MDWI03 Series | 3W

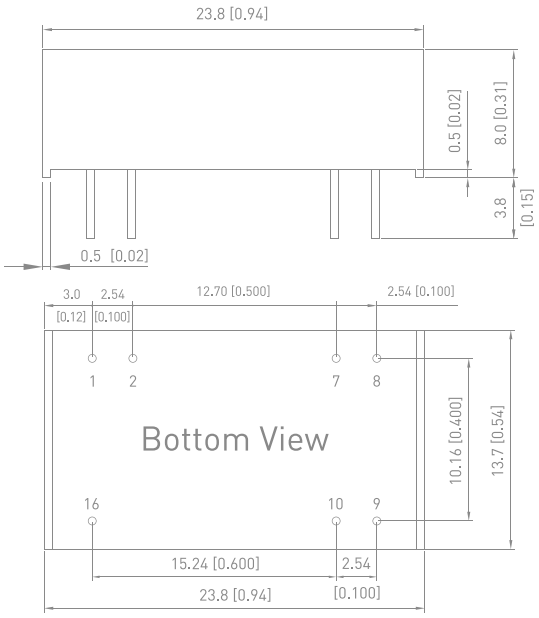


UL 62368-1 Scheme

- Compact DIP-16 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDWI03-24S033	24 (9 - 36)	3.3	600	75%
MDWI03-24S05		5	600	78%
MDWI03-24S12		12	250	80%
MDWI03-24S15		15	200	80%
MDWI03-24S24		24	125	80%
MDWI03-24D05		±5	±300	77%
MDWI03-24D12		±12	±125	80%
MDWI03-24D15		±15	±100	80%
MDWI03-48S033	48 (18 - 75)	3.3	600	75%
MDWI03-48S05		5	600	78%
MDWI03-48S12		12	250	80%
MDWI03-48S15		15	200	80%
MDWI03-48S24		24	125	80%
MDWI03-48D05		±5	±300	77%
MDWI03-48D12		±12	±125	80%
MDWI03-48D15		±15	±100	80%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
2	Remote On/Off	Remote On/Off
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

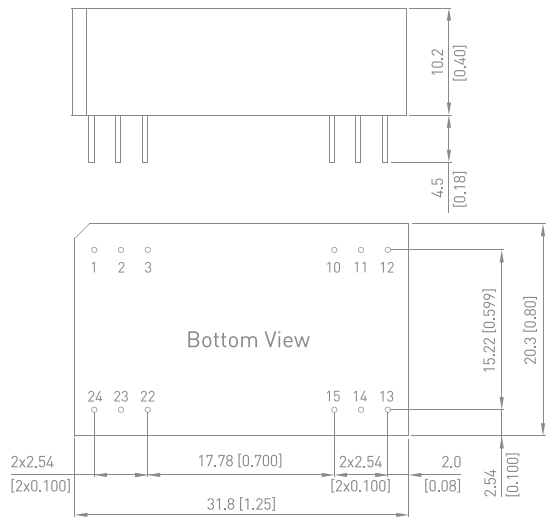
MIAR03 Series 3W

UL 62368-1 Scheme

- Industrial Standard DIP-24 Package
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIAR03-05S05	5 ±10%	5	600	70%
MIAR03-05S12		12	250	78%
MIAR03-05S15		15	200	78%
MIAR03-05D12		±12	±125	78%
MIAR03-05D15		±15	±100	78%
MIAR03-12S05	12 ±10%	5	600	74%
MIAR03-12S12		12	250	80%
MIAR03-12S15		15	200	80%
MIAR03-12D12		±12	±125	81%
MIAR03-12D15		±15	±100	82%
MIAR03-24S05	24 ±10%	5	600	75%
MIAR03-24S12		12	250	80%
MIAR03-24S15		15	200	80%
MIAR03-24D12		±12	±125	81%
MIAR03-24D15		±15	±100	82%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	NC	-Vout
3	NC	Common
10	-Vout	Common
11	+Vout	+Vout
12	-Vin	-Vin
13	-Vin	-Vin
14	+Vout	+Vout
15	-Vout	Common
22	NC	Common
23	NC	-Vout
24	+Vin	+Vin

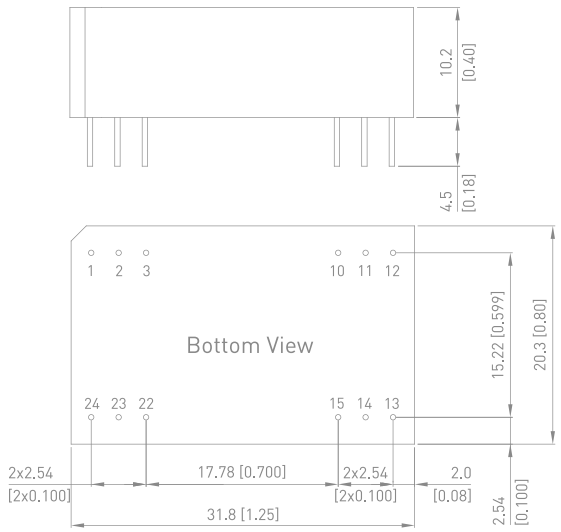
MIW1100 Series | 3W

UL 62368-1

- Industrial Standard DIP-24 Package
- Wide 2:1 & 3:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Overload and Short Circuit Protection
- UL/cUL/IEC/EN 60950-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIW1111	5 (4.5 ~ 9)	5	600	70%
MIW1112		12	250	74%
MIW1113		15	200	74%
MIW1114		±12	±125	74%
MIW1115		±15	±100	74%
MIW1121	12 (9 ~ 18)	5	600	76%
MIW1122		12	250	80%
MIW1123		15	200	80%
MIW1124		±12	±125	80%
MIW1125		±15	±100	80%
MIW1131	24 (18 ~ 36)	5	600	77%
MIW1132		12	250	81%
MIW1133		15	200	81%
MIW1134		±12	±125	81%
MIW1135		±15	±100	81%
MIW1141	48 (36 ~ 75)	5	600	77%
MIW1142		12	250	81%
MIW1143		15	200	81%
MIW1144		±12	±125	81%
MIW1145		±15	±100	81%
MIW1151	20 (10 ~ 30)	5	600	80%
MIW1152		12	250	80%
MIW1153		15	200	80%
MIW1154		±12	±125	80%
MIW1155		±15	±100	80%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	NC	-Vout
3	NC	Common
10	-Vout	Common
11	+Vout	+Vout
12	-Vin	-Vin
13	-Vin	-Vin
14	+Vout	+Vout
15	-Vout	Common
22	NC	Common
23	NC	-Vout
24	+Vin	+Vin

NC: No Connection

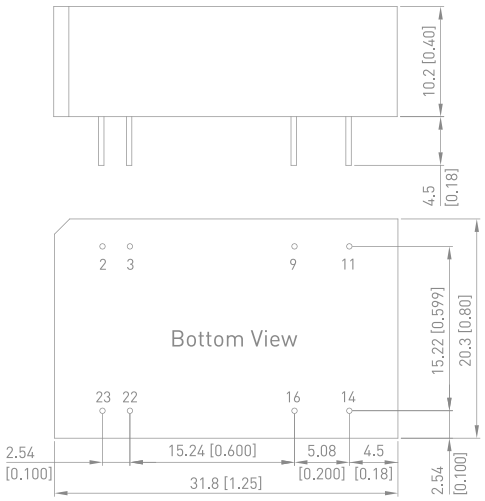
MIW03 Series | 3W

UL 62368-1 Scheme

- Industrial Standard DIP-24 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC (opt. 3000VDC)
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- EMI Emission EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE-Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIW03-05S033	5 (4.5 - 9)	3.3	750	77%
MIW03-05S05		5	600	80%
MIW03-05S12		12	250	82%
MIW03-05S15		15	200	82%
MIW03-05S24		24	125	81%
MIW03-05D05		±5	±250	80%
MIW03-05D12		±12	±125	82%
MIW03-05D15		±15	±100	82%
MIW03-12S033	12 (9 - 18)	3.3	750	79%
MIW03-12S05		5	600	81%
MIW03-12S12		12	250	85%
MIW03-12S15		15	200	85%
MIW03-12S24		24	125	84%
MIW03-12D05		±5	±250	80%
MIW03-12D12		±12	±125	84%
MIW03-12D15		±15	±100	84%
MIW03-24S033	24 (18 - 36)	3.3	750	79%
MIW03-24S05		5	600	81%
MIW03-24S12		12	250	85%
MIW03-24S15		15	200	85%
MIW03-24S24		24	125	84%
MIW03-24D05		±5	±250	80%
MIW03-24D12		±12	±125	84%
MIW03-24D15		±15	±100	84%
MIW03-48S033	48 (36 - 75)	3.3	750	79%
MIW03-48S05		5	600	81%
MIW03-48S12		12	250	85%
MIW03-48S15		15	200	85%
MIW03-48S24		24	125	84%
MIW03-48D05		±5	±250	80%
MIW03-48D12		±12	±125	84%
MIW03-48D15		±15	±100	84%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
2,3	-Vin	-Vin
9	No Pin	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22,23	+Vin	+Vin

NC: No Connection

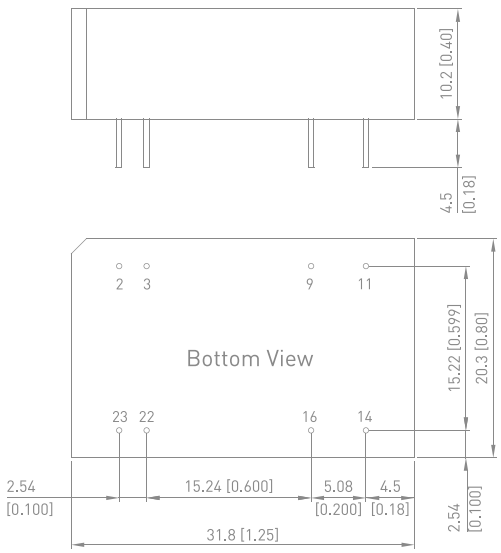
MIWI03 Series | 3W

UL 62368-1 Scheme

- Industrial Standard DIP-24 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC (opt. 3000VDC)
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- EMI Emission EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE-Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIWI03-24S033	24 (9 - 36)	3.3	750	77%
MIWI03-24S05		5	600	79%
MIWI03-24S12		12	250	82%
MIWI03-24S15		15	200	83%
MIWI03-24S24		24	125	81%
MIWI03-24D05		±5	±300	80%
MIWI03-24D12		±12	±125	82%
MIWI03-24D15		±15	±100	82%
MIWI03-48S033	48 (18 - 75)	3.3	750	77%
MIWI03-48S05		5	600	80%
MIWI03-48S12		12	250	83%
MIWI03-48S15		15	200	84%
MIWI03-48S24		24	125	82%
MIWI03-48D05		±5	±300	80%
MIWI03-48D12		±12	±125	82%
MIWI03-48D15		±15	±100	82%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
2,3	-Vin	-Vin
9	No Pin	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22,23	+Vin	+Vin

NC= No Connection

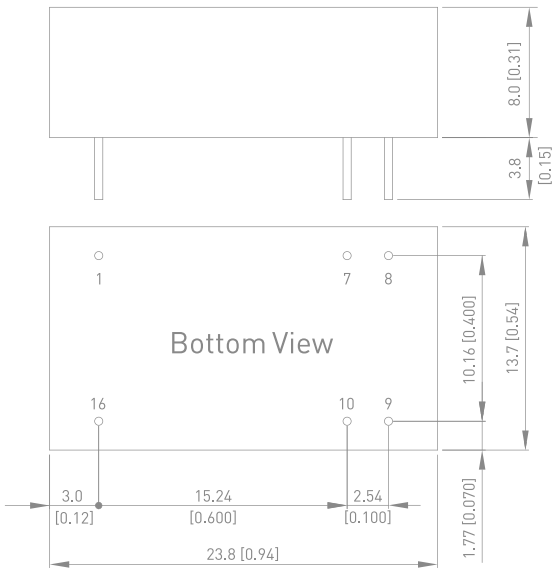
MDWI06 Series | 6W

UL 62368-1 Scheme

- Smallest Encapsulated 6W Converter
- Industrial Standard DIP-16 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDWI06-24S033	24 (9 - 36)	3.3	1,500	78%
MDWI06-24S05		5	1,200	82%
MDWI06-24S12		12	500	86%
MDWI06-24S15		15	400	86%
MDWI06-24S24		24	250	87%
MDWI06-24D12		±12	±250	86%
MDWI06-24D15		±15	±200	87%
MDWI06-48S033	48 (18 - 75)	3.3	1,500	78%
MDWI06-48S05		5	1,200	82%
MDWI06-48S12		12	500	86%
MDWI06-48S15		15	400	86%
MDWI06-48S24		24	250	87%
MDWI06-48D12		±12	±250	87%
MDWI06-48D15		±15	±200	87%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC: No Connection

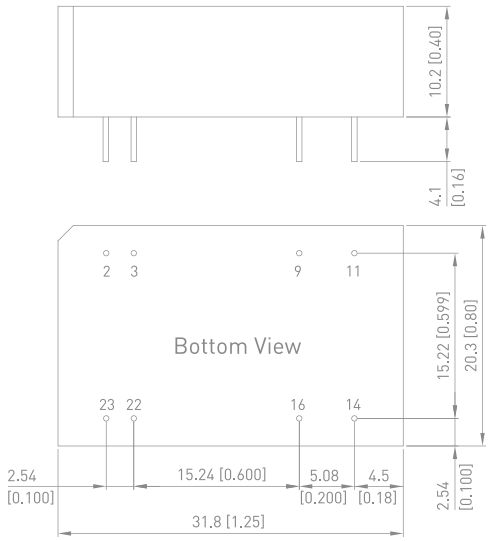
MIW06 Series | 6W

UL 62368-1 Scheme

- Industrial Standard DIP-24 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC (opt. 3000VDC)
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIW06-12S033	12 (9 - 18)	3.3	1,200	75%
MIW06-12S05		5	1,200	78%
MIW06-12S12		12	500	82%
MIW06-12S15		15	400	82%
MIW06-12S24		24	250	84%
MIW06-12D05		±5	±500	78%
MIW06-12D12		±12	±250	82%
MIW06-12D15		±15	±200	82%
MIW06-24S033	24 (18 - 36)	3.3	1,200	77%
MIW06-24S05		5	1,200	80%
MIW06-24S12		12	500	84%
MIW06-24S15		15	400	84%
MIW06-24S24		24	250	84%
MIW06-24D05		±5	±500	80%
MIW06-24D12		±12	±250	84%
MIW06-24D15		±15	±200	84%
MIW06-48S033	48 (36 - 75)	3.3	1,200	77%
MIW06-48S05		5	1,200	80%
MIW06-48S12		12	500	84%
MIW06-48S15		15	400	84%
MIW06-48S24		24	250	84%
MIW06-48D05		±5	±500	80%
MIW06-48D12		±12	±250	84%
MIW06-48D15		±15	±200	84%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
2,3	-Vin	-Vin
9	No Pin	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22,23	+Vin	+Vin

NC= No Connection

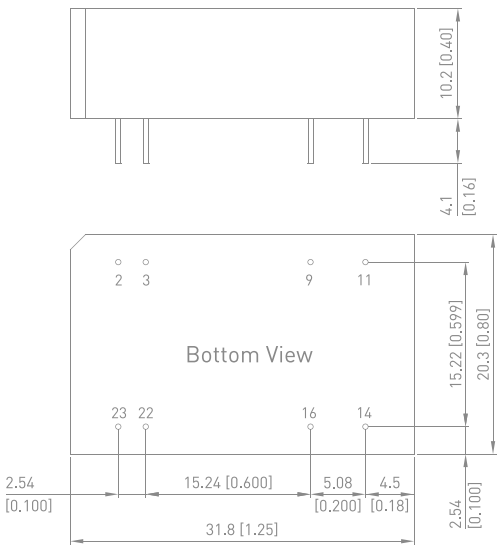
MIWI06 Series | 6W

UL 62368-1 Scheme

- Industrial Standard DIP-24 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC (opt. 3000VDC)
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIWI06-24S033	24 (9 - 36)	3.3	1,200	77%
MIWI06-24S05		5	1,200	80%
MIWI06-24S12		12	500	84%
MIWI06-24S15		15	400	84%
MIWI06-24S24		24	250	84%
MIWI06-24D05		±5	±500	80%
MIWI06-24D12		±12	±250	84%
MIWI06-24D15		±15	±200	84%
MIWI06-48S033	48 (18 - 75)	3.3	1,200	77%
MIWI06-48S05		5	1,200	80%
MIWI06-48S12		12	500	84%
MIWI06-48S15		15	400	84%
MIWI06-48S24		24	250	84%
MIWI06-48D05		±5	±500	80%
MIWI06-48D12		±12	±250	84%
MIWI06-48D15		±15	±200	84%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
2,3	-Vin	-Vin
9	No Pin	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22,23	+Vin	+Vin

NC: No Connection

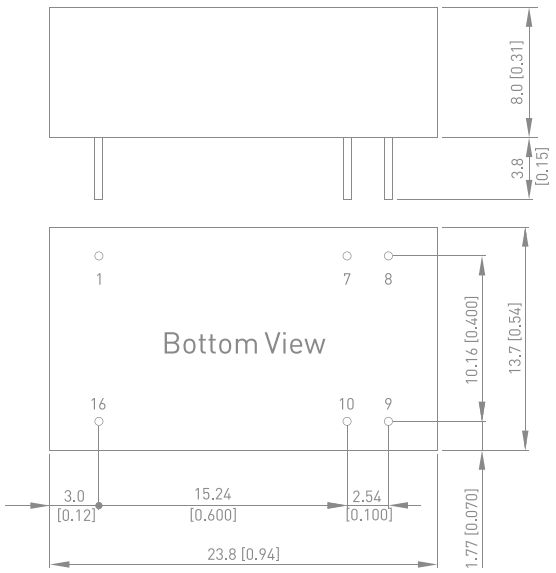
MDW08 Series | 8W

UL 62368-1 Scheme

- Smallest Encapsulated 8W Converter
- Industrial Standard DIP-16 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDW08-12S033	12 (9 - 18)	3.3	1,600	78%
MDW08-12S05		5	1,600	81%
MDW08-12S12		12	665	84%
MDW08-12S15		15	535	84%
MDW08-12S24		24	335	85%
MDW08-12D12		±12	±335	85%
MDW08-12D15		±15	±265	84%
MDW08-24S033	24 (18 - 36)	3.3	1,600	78%
MDW08-24S05		5	1,600	82%
MDW08-24S12		12	665	85%
MDW08-24S15		15	535	85%
MDW08-24S24		24	335	86%
MDW08-24D12		±12	±335	85%
MDW08-24D15		±15	±265	86%
MDW08-48S033	48 (36 - 75)	3.3	1,600	78%
MDW08-48S05		5	1,600	81%
MDW08-48S12		12	665	85%
MDW08-48S15		15	535	85%
MDW08-48S24		24	335	86%
MDW08-48D12		±12	±335	86%
MDW08-48D15		±15	±265	86%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC= No Connection

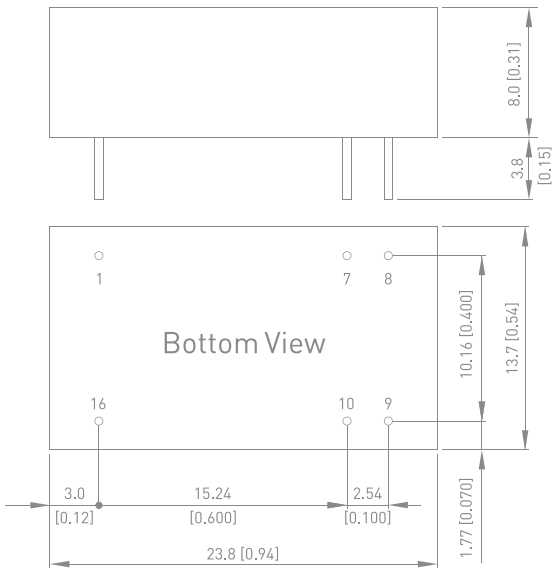
MDWI08 Series | 8W

UL 62368-1 Scheme

- Smallest Encapsulated 8W Converter
- Industrial Standard DIP-16 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDWI08-24S033	24 (9 - 36)	3.3	2,000	78%
MDWI08-24S05		5	1,600	82%
MDWI08-24S12		12	665	85%
MDWI08-24S15		15	535	85%
MDWI08-24S24		24	335	86%
MDWI08-24D12		±12	±335	85%
MDWI08-24D15		±15	±265	86%
MDWI08-48S033	48 (18 - 75)	3.3	2,000	78%
MDWI08-48S05		5	1,600	81%
MDWI08-48S12		12	665	85%
MDWI08-48S15		15	535	85%
MDWI08-48S24		24	335	86%
MDWI08-48D12		±12	±335	86%
MDWI08-48D15		±15	±265	86%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC: No Connection

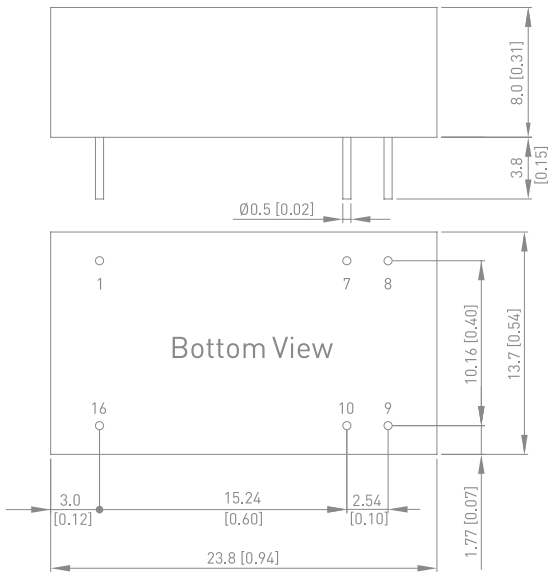
MDW10 Series | 10W

UL 62368-1 Scheme

- Smallest Encapsulated 10W Converter
- Industrial Standard DIP-16 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A & FCC Level A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDW10-12S033	12 (9 - 18)	3.3	2,700	79%
MDW10-12S05		5	2,000	82%
MDW10-12S051		5.1	2,000	82%
MDW10-12S12		12	833	86%
MDW10-12S15		15	666	87%
MDW10-12S24		24	416	87%
MDW10-12D12		±12	±416	86%
MDW10-12D15		±15	±333	86%
MDW10-24S033	24 (18 - 36)	3.3	2,700	80%
MDW10-24S05		5	2,000	83%
MDW10-24S051		5.1	2,000	83%
MDW10-24S12		12	833	87%
MDW10-24S15		15	666	88%
MDW10-24S24		24	416	88%
MDW10-24D12		±12	±416	87%
MDW10-24D15		±15	±333	87%
MDW10-48S033	48 (36 - 75)	3.3	2,700	80%
MDW10-48S05		5	2,000	83%
MDW10-48S051		5.1	2,000	83%
MDW10-48S12		12	833	87%
MDW10-48S15		15	666	88%
MDW10-48S24		24	416	88%
MDW10-48D12		±12	±416	87%
MDW10-48D15		±15	±333	87%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC= No Connection

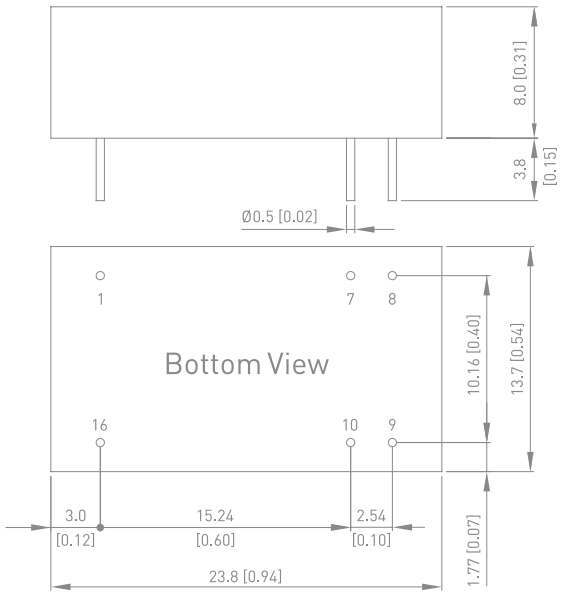
MDWI10 Series | 10W

UL 62368-1 Scheme

- Smallest Encapsulated 10W Converter
- Industrial Standard DIP-16 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDWI10-24S033	24 (9 - 36)	3.3	2,700	80%
MDWI10-24S05		5	2,000	83%
MDWI10-24S051		5.1	2,000	83%
MDWI10-24S12		12	833	87%
MDWI10-24S15		15	666	88%
MDWI10-24S24		24	416	88%
MDWI10-24D12		±12	±416	87%
MDWI10-24D15		±15	±333	87%
MDWI10-48S033	48 (18 - 75)	3.3	2,700	80%
MDWI10-48S05		5	2,000	83%
MDWI10-48S051		5.1	2,000	83%
MDWI10-48S12		12	833	87%
MDWI10-48S15		15	666	88%
MDWI10-48S24		24	416	88%
MDWI10-48D12		±12	±416	87%
MDWI10-48D15		±15	±333	87%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC: No Connection

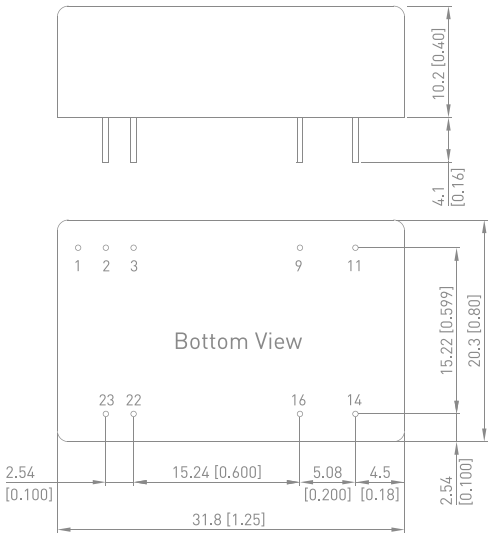
MIW10 Series | 10W

UL 62368-1 Scheme

- Industrial Standard DIP-24 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-Voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIW10-12S033	12 (9 - 18)	3.3	2,700	86%
MIW10-12S05		5	2,000	85%
MIW10-12S051		5.1	2,000	85%
MIW10-12S12		12	833	88%
MIW10-12S15		15	666	89%
MIW10-12D12		±12	±416	88%
MIW10-12D15		±15	±333	89%
MIW10-24S033	24 (18 - 36)	3.3	2,700	86%
MIW10-24S05		5	2,000	85%
MIW10-24S051		5.1	2,000	85%
MIW10-24S12		12	833	89%
MIW10-24S15		15	666	89%
MIW10-24D12		±12	±416	88%
MIW10-24D15		±15	±333	89%
MIW10-48S033	48 (36 - 75)	3.3	2,700	86%
MIW10-48S05		5	2,000	85%
MIW10-48S051		5.1	2,000	85%
MIW10-48S12		12	833	87%
MIW10-48S15		15	666	88%
MIW10-48D12		±12	±416	87%
MIW10-48D15		±15	±333	88%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2,3	-Vin	-Vin
9	No Pin	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22,23	+Vin	+Vin

NC= No Connection

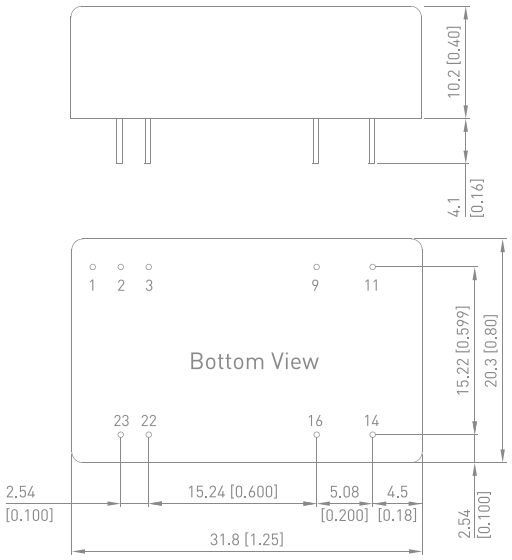
MIWI10 Series | 10W

UL 62368-1 Scheme

- Industrial Standard DIP-24 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- High Efficiency up to 87%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload and Short Circuit Protection
- Remote On/Off Control
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIWI10-24S033	24 (9 - 36)	3.3	2,700	86%
MIWI10-24S05		5	2,000	85%
MIWI10-24S051		5.1	2,000	85%
MIWI10-24S12		12	833	87%
MIWI10-24S15		15	666	87%
MIWI10-24S24		24	416	87%
MIWI10-24D12		±12	±416	87%
MIWI10-24D15		±15	±333	87%
MIWI10-48S033	48 (18 - 75)	3.3	2,700	86%
MIWI10-48S05		5	2,000	85%
MIWI10-48S051		5.1	2,000	85%
MIWI10-48S12		12	833	87%
MIWI10-48S15		15	666	87%
MIWI10-48S24		24	416	87%
MIWI10-48D12		±12	±416	87%
MIWI10-48D15		±15	±333	87%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2,3	-Vin	-Vin
9	No Pin	Common
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Common
22,23	+Vin	+Vin

NC: No Connection

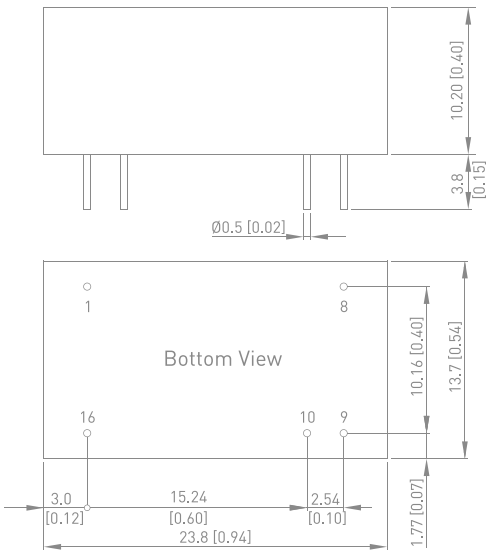
MDW12 Series | 12W

UL 62368-1 Scheme

- Smallest Encapsulated 12W Converter
- Industrial Standard DIP-16 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDW12-12S05	12 (9 - 18)	5	2,400	83%
MDW12-12S051		5.1	2,400	83%
MDW12-12S12		12	1,000	87%
MDW12-12S15		15	800	88%
MDW12-12S24		24	500	88%
MDW12-12D12		±12	±500	87%
MDW12-12D15		±15	±400	87%
MDW12-24S05	24 (18 - 36)	5	2,400	83%
MDW12-24S051		5.1	2,400	83%
MDW12-24S12		12	1,000	87%
MDW12-24S15		15	800	88%
MDW12-24S24		24	500	88%
MDW12-24D12		±12	±500	87%
MDW12-24D15		±15	±400	87%
MDW12-48S05	48 (36 - 75)	5	2,400	83%
MDW12-48S051		5.1	2,400	83%
MDW12-48S12		12	1,000	87%
MDW12-48S15		15	800	88%
MDW12-48S24		24	500	88%
MDW12-48D12		±12	±500	87%
MDW12-48D15		±15	±400	87%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC= No Connection

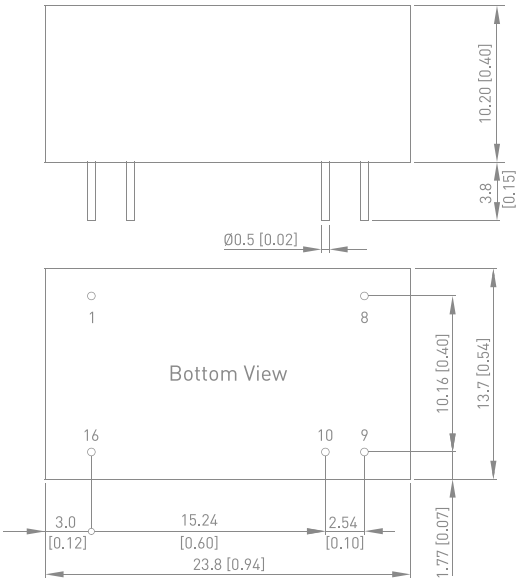
MDWI12 Series | 12W

UL 62368-1 Scheme

- Smallest Encapsulated 12W Converter
- Industrial Standard DIP-16 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDWI12-24S05	24 (9 - 36)	5	2,400	83%
MDWI12-24S051		5.1	2,400	83%
MDWI12-24S12		12	1,000	87%
MDWI12-24S15		15	800	88%
MDWI12-24S24		24	500	88%
MDWI12-24D12		±12	±500	87%
MDWI12-24D15		±15	±400	87%
MDWI12-48S05	48 (18 - 75)	5	2,400	83%
MDWI12-48S051		5.1	2,400	83%
MDWI12-48S12		12	1,000	87%
MDWI12-48S15		15	800	88%
MDWI12-48S24		24	500	88%
MDWI12-48D12		±12	±500	87%
MDWI12-48D15		±15	±400	87%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC: No Connection

NEW

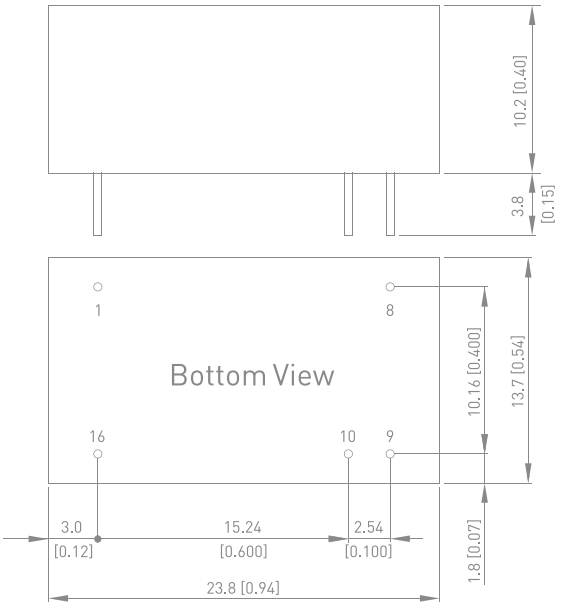
MDW15 Series | 15W

UL 62368-1 Scheme

- Smallest Encapsulated 15W Converter
- Industrial Standard DIP-16 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDW15-12S051	12 (9 - 18)	5.1	2,940	86%
MDW15-12S12		12	1,250	87%
MDW15-12S15		15	1,000	87%
MDW15-12S24		24	625	87%
MDW15-12D12		±12	±625	87%
MDW15-12D15		±15	±500	87%
MDW15-24S051	24 (18 - 36)	5.1	2,940	86%
MDW15-24S12		12	1,250	87%
MDW15-24S15		15	1,000	87%
MDW15-24S24		24	625	87%
MDW15-24D12		±12	±625	87%
MDW15-24D15		±15	±500	87%
MDW15-48S051	48 (36 - 75)	5.1	2,940	86%
MDW15-48S12		12	1,250	87%
MDW15-48S15		15	1,000	87%
MDW15-48S24		24	625	87%
MDW15-48D12		±12	±625	87%
MDW15-48D15		±15	±500	87%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC= No Connection

NEW

MDWI15 Series | 15W

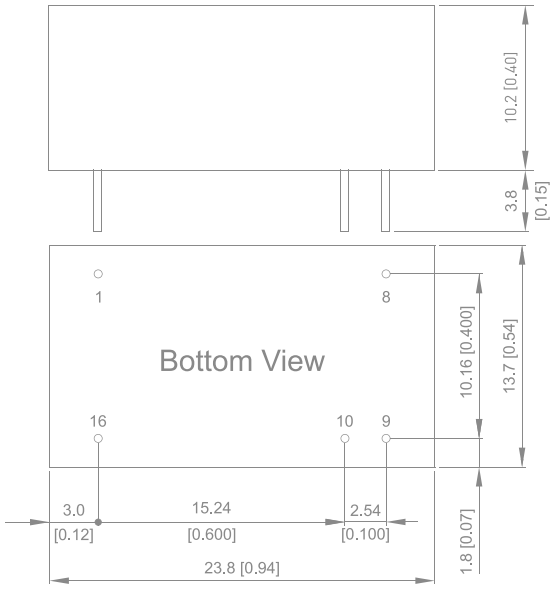
UL 62368-1 Scheme

- Smallest Encapsulated 15W Converter
- Industrial Standard DIP-16 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDWI15-24S051	24 (9 - 36)	5.1	2,940	86%
MDWI15-24S12		12	1,250	87%
MDWI15-24S15		15	1,000	87%
MDWI15-24S24		24	625	87%
MDWI15-24D12		±12	±625	87%
MDWI15-24D15		±15	±500	87%
MDWI15-48S051	48 (18 - 75)	5.1	2,940	86%
MDWI15-48S12		12	1,250	87%
MDWI15-48S15		15	1,000	87%
MDWI15-48S24		24	625	87%
MDWI15-48D12		±12	±625	87%
MDWI15-48D15		±15	±500	87%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC: No Connection

NEW

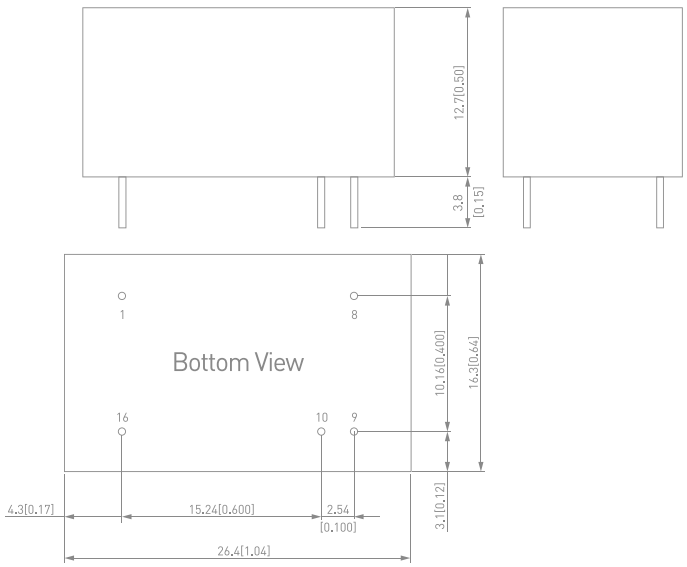
MDWI20 Series | 20W

UL 62368-1 Scheme

- Smallest Encapsulated 20W Converter
- Industrial Standard DIP-16 Package
- High Power Density 60W/in³
- Excellent Efficiency up to 90%
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Operating Ambient Temp. Range -40°C to +87.5°C
- Low No Load Power Consumption
- No Min. Load Requirement/Output Trim
- Under-voltage, Overload and Short Circuit Protection
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDWI20-12S05	12 (4.5 - 18)	5	4000	88%
MDWI20-12S12		12	1670	89%
MDWI20-12S15		15	1340	88%
MDWI20-12S24		24	835	89%
MDWI20-12D12		±12	±835	88%
MDWI20-12D15		±15	±667	87%
MDWI20-24S05	24 (9 - 36)	5	4000	89%
MDWI20-24S12		12	1670	90%
MDWI20-24S15		15	1340	89%
MDWI20-24S24		24	835	90%
MDWI20-24D12		±12	±835	89%
MDWI20-24D15		±15	±667	88%
MDWI20-48S05	48 (18 - 75)	5	4000	89%
MDWI20-48S12		12	1670	90%
MDWI20-48S15		15	1340	89%
MDWI20-48S24		24	835	90%
MDWI20-48D12		±12	±835	89%
MDWI20-48D15		±15	±667	88%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
8	Trim	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

MJW10 Series | 10W

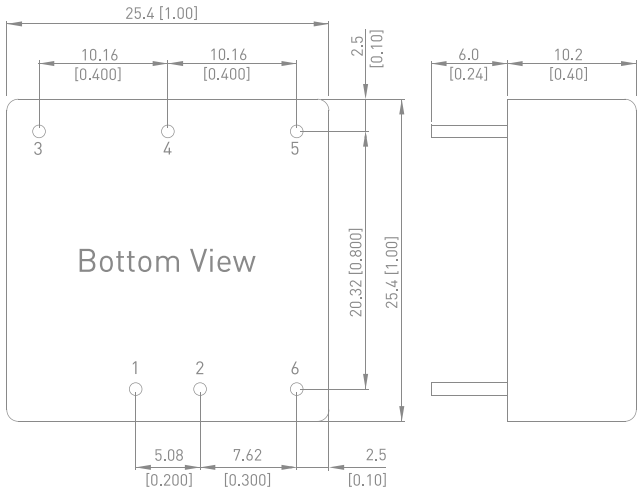
UL 62368-1 Scheme

- Industrial Standard 1" x 1" Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control (option)
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJW10-12S033	12 (9 - 18)	3.3	2,500	82%
MJW10-12S05		5	2,000	85%
MJW10-12S051		5.1	2,000	85%
MJW10-12S12		12	830	87%
MJW10-12S15		15	670	88%
MJW10-12D05		±5	±1000	84%
MJW10-12D12		±12	±416	87%
MJW10-12D15		±15	±333	87%
MJW10-24S033	24 (18 - 36)	3.3	2,500	83%
MJW10-24S05		5	2,000	85%
MJW10-24S051		5.1	2,000	85%
MJW10-24S12		12	830	88%
MJW10-24S15		15	670	89%
MJW10-24D05		±5	±1000	85%
MJW10-24D12		±12	±416	88%
MJW10-24D15		±15	±333	89%
MJW10-48S033	48 (36 - 75)	3.3	2,500	83%
MJW10-48S05		5	2,000	86%
MJW10-48S051		5.1	2,000	85%
MJW10-48S12		12	830	89%
MJW10-48S15		15	670	89%
MJW10-48D05		±5	±1000	86%
MJW10-48D12		±12	±416	87%
MJW10-48D15		±15	±333	88%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout
6	Remote On/Off (Optional)	Remote On/Off (Optional)

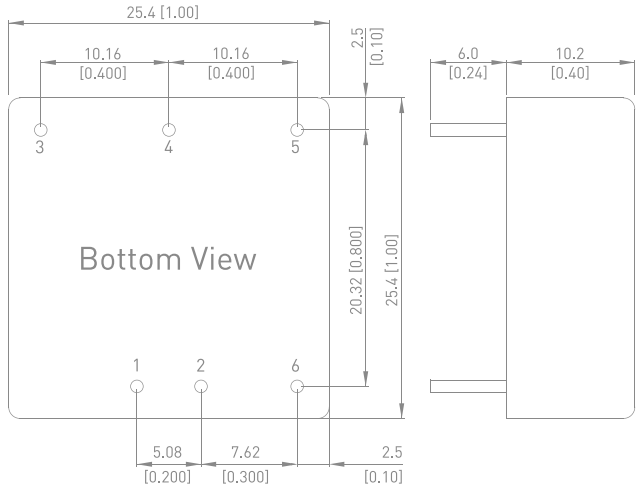
MJWI10 Series | 10W

- Ultra-compact 1"×1" Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- High Efficiency up to 87%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJWI10-24S033	24 (9 - 36)	3.3	2,200	86%
MJWI10-24S05		5	2,000	84%
MJWI10-24S051		5.1	2,000	84%
MJWI10-24S12		12	830	86%
MJWI10-24S15		15	660	87%
MJWI10-24S24		24	410	86%
MJWI10-24D05		±5	±1000	84%
MJWI10-24D12		±12	±410	86%
MJWI10-24D15		±15	±330	87%
MJWI10-48S033	48 (18 - 75)	3.3	2,200	85%
MJWI10-48S05		5	2,000	84%
MJWI10-48S051		5.1	2,000	84%
MJWI10-48S12		12	830	86%
MJWI10-48S15		15	660	87%
MJWI10-48S24		24	410	86%
MJWI10-48D05		±5	±1000	84%
MJWI10-48D12		±12	±410	86%
MJWI10-48D15		±15	±330	87%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

MJW15 Series | 15W

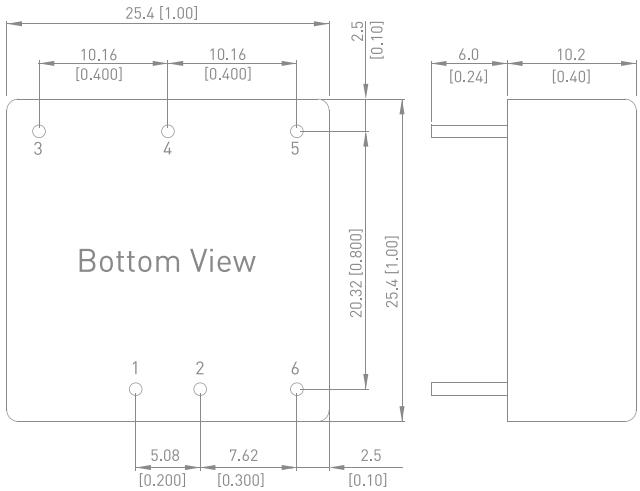
UL 62368-1 Scheme

- Industrial Standard 1" x 1" Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJW15-12S033	12 (9 - 18)	3.3	3,400	86%
MJW15-12S05		5	3,000	89%
MJW15-12S12		12	1,250	89%
MJW15-12S15		15	1,000	89%
MJW15-12S24		24	625	90%
MJW15-12D12		±12	±625	89%
MJW15-12D15		±15	±500	90%
MJW15-24S033	24 (18 - 36)	3.3	3,400	86%
MJW15-24S05		5	3,000	88%
MJW15-24S12		12	1,250	90%
MJW15-24S15		15	1,000	90%
MJW15-24S24		24	625	91%
MJW15-24D12		±12	±625	90%
MJW15-24D15		±15	±500	90%
MJW15-48S033	48 (36 - 75)	3.3	3,400	87%
MJW15-48S05		5	3,000	88%
MJW15-48S12		12	1,250	90%
MJW15-48S15		15	1,000	90%
MJW15-48S24		24	625	91%
MJW15-48D12		±12	±625	89%
MJW15-48D15		±15	±500	90%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

MJWI15 Series | 15W

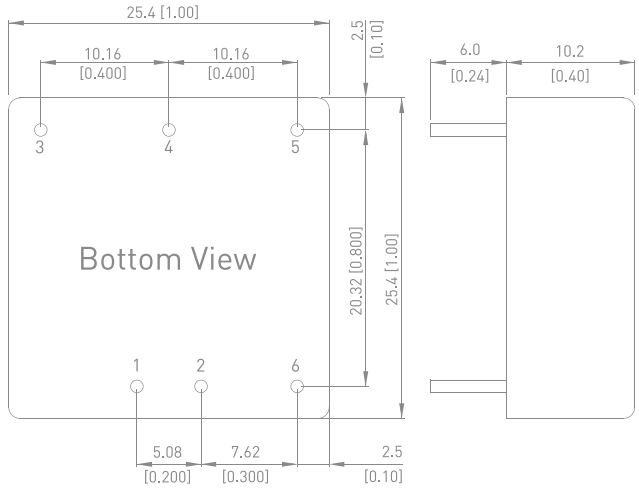
UL 62368-1 Scheme

- Industrial Standard 1" X 1" Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 91%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJWI15-24S033	24 (9 - 36)	3.3	3,400	86%
MJWI15-24S05		5	3,000	88%
MJWI15-24S12		12	1,250	88%
MJWI15-24S15		15	1,000	89%
MJWI15-24S24		24	625	91%
MJWI15-24D12		±12	±625	89%
MJWI15-24D15		±15	±500	89%
MJWI15-48S033	48 (18 - 75)	3.3	3,400	86%
MJWI15-48S05		5	3,000	88%
MJWI15-48S12		12	1,250	89%
MJWI15-48S15		15	1,000	89%
MJWI15-48S24		24	625	91%
MJWI15-48D12		±12	±625	90%
MJWI15-48D15		±15	±500	89%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

MJWI20 Series | 20W

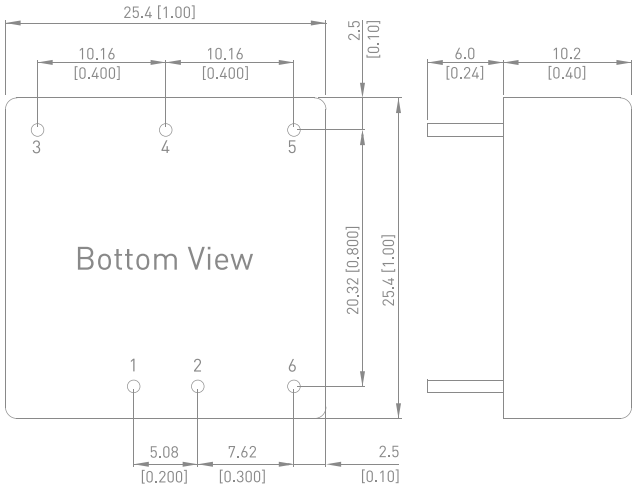
UL 62368-1 Scheme

- Smallest Encapsulated 20W Converter
- Ultra-compact 1" X 1" Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 89%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload/Voltage and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJWI20-24S033	24 (9 - 36)	3.3	4,500	87%
MJWI20-24S05		5	4,000	89%
MJWI20-24S12		12	1,670	89%
MJWI20-24S15		15	1,340	89%
MJWI20-24S24		24	835	88%
MJWI20-24D12		±12	±835	89%
MJWI20-24D15		±15	±670	89%
MJWI20-48S033	48 (18 - 75)	3.3	4,500	88%
MJWI20-48S05		5	4,000	89%
MJWI20-48S12		12	1,670	89%
MJWI20-48S15		15	1,340	89%
MJWI20-48S24		24	835	88%
MJWI20-48D12		±12	±835	89%
MJWI20-48D15		±15	±670	89%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

MJW25 Series | 25W

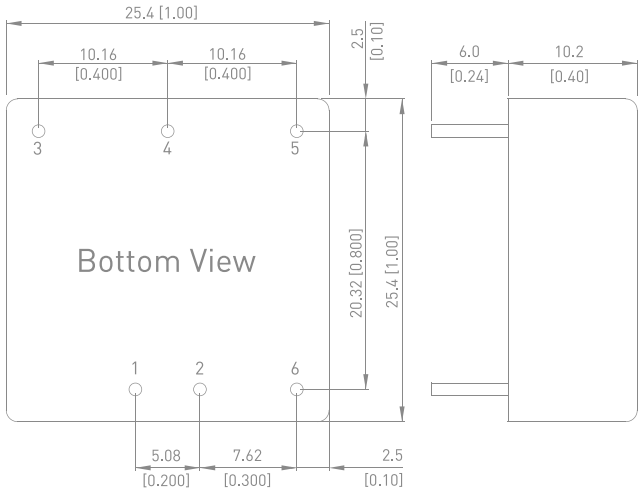
UL 62368-1 Scheme

- Smallest Encapsulated 25W Converter
- Ultra-compact 1" X 1" Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 90%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload/Voltage and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJW25-12S033	12 (9 - 18)	3.3	6,000	87%
MJW25-12S05		5	5,000	89%
MJW25-12S12		12	2,090	89%
MJW25-12S15		15	1,670	89%
MJW25-12D12		±12	±1040	89%
MJW25-12D15		±15	±840	89%
MJW25-24S033	24 (18 - 36)	3.3	6,000	88%
MJW25-24S05		5	5,000	90%
MJW25-24S12		12	2,090	90%
MJW25-24S15		15	1,670	90%
MJW25-24D12		±12	±1040	89%
MJW25-24D15		±15	±840	89%
MJW25-48S033	48 (36 - 75)	3.3	6,000	88%
MJW25-48S05		5	5,000	90%
MJW25-48S12		12	2,090	90%
MJW25-48S15		15	1,670	90%
MJW25-48D12		±12	±1040	89%
MJW25-48D15		±15	±840	89%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

MJWI25 Series | 25W

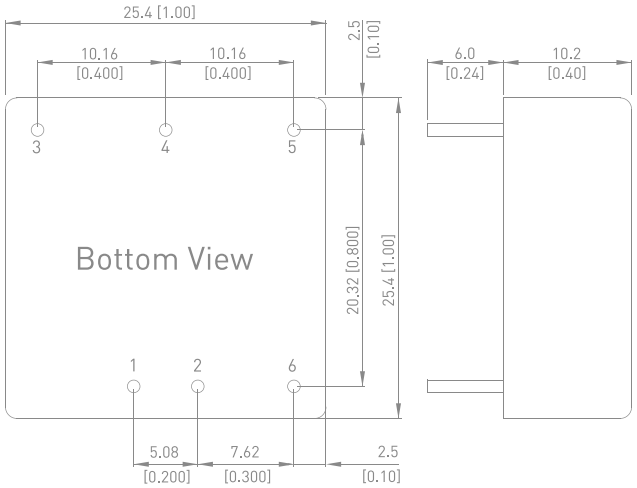
UL 62368-1 Scheme

- Smallest Encapsulated 25W Converter
- Ultra-compact 1" X 1" Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 90%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload/Voltage and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJWI25-24S033	24 (9 - 36)	3.3	6,000	87%
MJWI25-24S05		5	5,000	89%
MJWI25-24S12		12	2,090	89%
MJWI25-24S15		15	1,670	90%
MJWI25-24D12		±12	±1040	89%
MJWI25-24D15		±15	±840	89%
MJWI25-48S033	48 (18 - 75)	3.3	6,000	88%
MJWI25-48S05		5	5,000	90%
MJWI25-48S12		12	2,090	90%
MJWI25-48S15		15	1,670	90%
MJWI25-48D12		±12	±1040	89%
MJWI25-48D15		±15	±840	89%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

MJWI30 Series | 30W

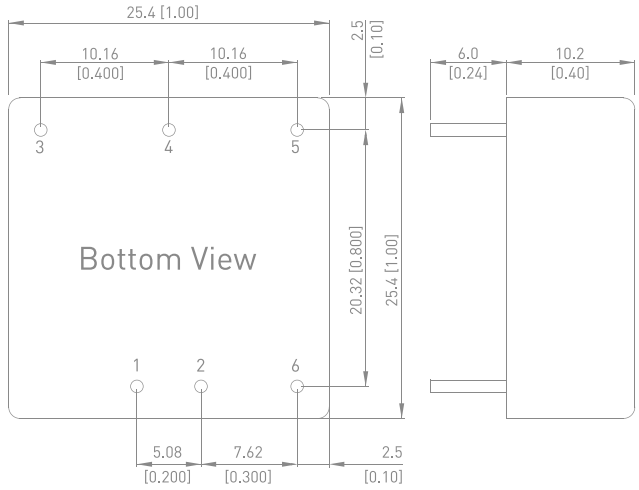
UL 62368-1 Scheme

- Smallest Encapsulated 30W Converter
- Ultra-compact 1"×1" Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 90%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Very low no load power consumption
- Under-voltage, Overload/Voltage and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJWI30-24S033	24 (9 - 36)	3.3	7,000	87%
MJWI30-24S05		5	6,000	88%
MJWI30-24S12		12	2,500	88%
MJWI30-24S15		15	2,000	88%
MJWI30-24S24		24	1,250	88%
MJWI30-24D12		±12	±1250	88%
MJWI30-24D15		±15	±1000	88%
MJWI30-48S033	48 (18 - 75)	3.3	7,000	87%
MJWI30-48S05		5	6,000	88%
MJWI30-48S12		12	2,500	90%
MJWI30-48S15		15	2,000	90%
MJWI30-48S24		24	1,250	90%
MJWI30-48D12		±12	±1250	90%
MJWI30-48D15		±15	±1000	90%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

NEW

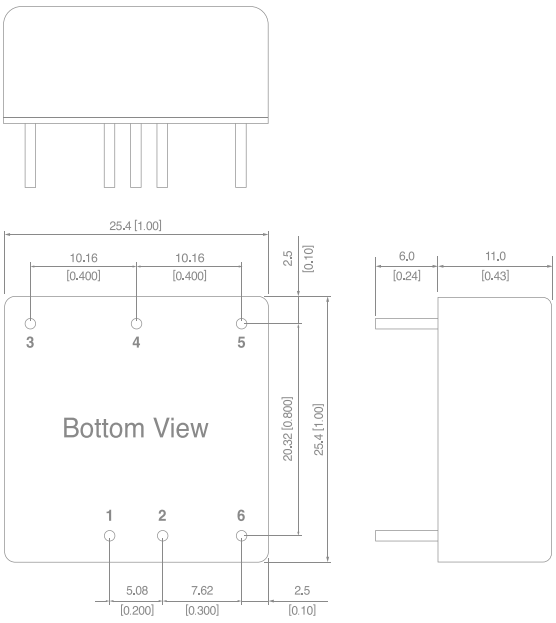
MJWI40 Series | 40W

UL 62368-1 Scheme

- Smallest Encapsulated 40W Converter
- Ultra-compact 1"×1" Package
- Ultra-high Power Density 93W/in³
- Excellent Efficiency up to 93%
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Very Low No Load Power Consumption
- Under-voltage, Overload/Temperature and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJWI40-24S05	24 (9 - 36)	5	8000	91%
MJWI40-24S12		12	3350	92%
MJWI40-24S15		15	2700	92%
MJWI40-24S24		24	1700	91%
MJWI40-24S48		48	835	90%
MJWI40-24S54		54	740	91%
MJWI40-24D12		±12	±1700	91%
MJWI40-24D15		±15	±1350	91%
MJWI40-48S05	48 (18 - 75)	5	8000	92%
MJWI40-48S12		12	3350	93%
MJWI40-48S15		15	2700	93%
MJWI40-48S24		24	1700	92%
MJWI40-48S48		48	835	90%
MJWI40-48S54		54	740	91%
MJWI40-48D12		±12	±1700	91%
MJWI40-48D15		±15	±1350	90%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	Common
5	-Vout	-Vout
6	Remote On/Off	Remote On/Off

MKW40 Series | 40W

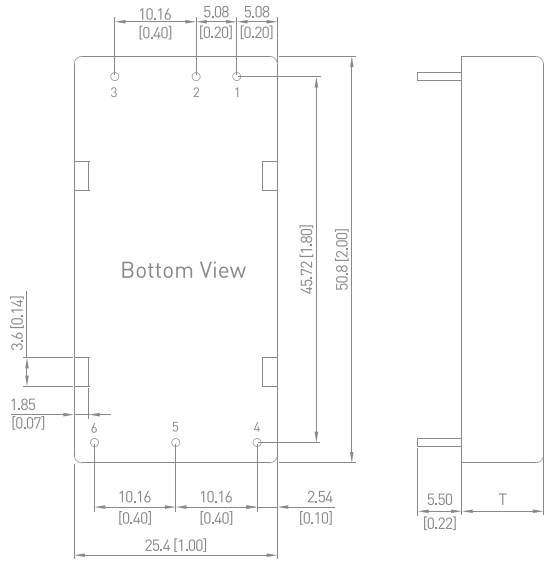
UL 62368-1 Scheme

- Smallest Encapsulated 40W Converter
- Compact Size of 2" X 1" Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 92%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload/Voltage/Temp. and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKW40-12S033	12 (9 - 18)	3.3	8,000	89%
MKW40-12S05		5	8,000	89%
MKW40-12S12		12	3,330	89%
MKW40-12S15		15	2,670	90%
MKW40-12S24		24	1,670	91%
MKW40-12D12		±12	±1670	88%
MKW40-12D15		±15	±1330	88%
MKW40-24S033	24 (18 - 36)	3.3	8,000	90%
MKW40-24S05		5	8,000	91%
MKW40-24S12		12	3,330	91%
MKW40-24S15		15	2,670	91%
MKW40-24S24		24	1,670	91%
MKW40-24D12		±12	±1670	89%
MKW40-24D15		±15	±1330	89%
MKW40-48S033	48 (36 - 75)	3.3	8,000	90%
MKW40-48S05		5	8,000	91%
MKW40-48S12		12	3,330	92%
MKW40-48S15		15	2,670	92%
MKW40-48S24		24	1,670	91%
MKW40-48D12		±12	±1670	89%
MKW40-48D15		±15	±1330	89%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	Remote On/Off	Remote On/Off
4	+Vout	+Vout
5	-Vout	Common
6	Trim	-Vout

T: 10.2[0.40] for other output models
T: 11.0[0.43]for 24V output models

MKWI40 Series | 40W

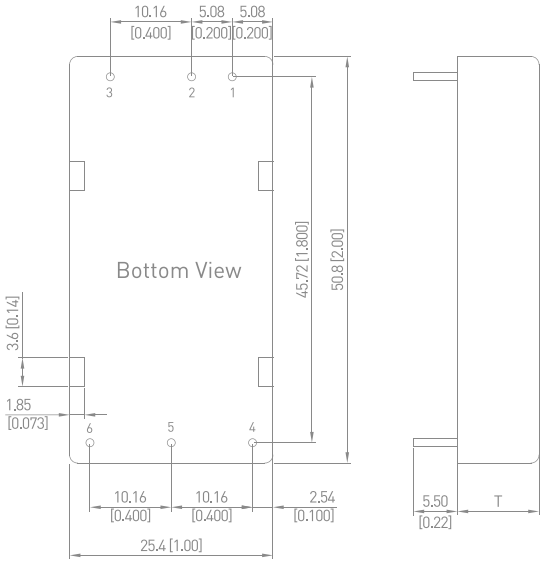
UL 62368-1 Scheme

- Smallest Encapsulated 40W Converter
- Ultra-compact 2" X 1" Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 91%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload/Voltage/Temp. and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKWI40-24S033	24 (9 - 36)	3.3	8,000	89%
MKWI40-24S05		5	8,000	90%
MKWI40-24S12		12	3,330	89%
MKWI40-24S15		15	2,670	89%
MKWI40-24S24		24	1,670	91%
MKWI40-24D12		±12	±1670	88%
MKWI40-24D15		±15	±1330	88%
MKWI40-48S033	24 (18 - 36)	3.3	8,000	89%
MKWI40-48S05		5	8,000	90%
MKWI40-48S12		12	3,330	90%
MKWI40-48S15		15	2,670	90%
MKWI40-48S24		24	1,670	91%
MKWI40-48D12		±12	±1670	88%
MKWI40-48D15		±15	±1330	88%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	Remote On/Off	Remote On/Off
4	+Vout	+Vout
5	-Vout	Common
6	Trim	-Vout

T: 10.2[0.40] for other output models
T: 11.0[0.43]for 24V output models

MKW50 Series | 50W

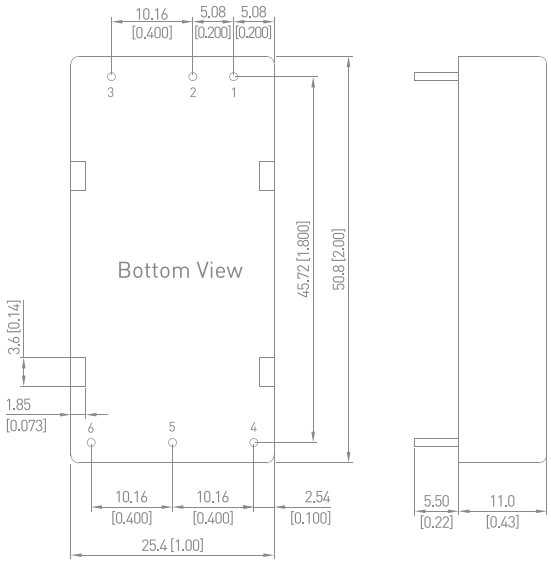
UL 62368-1 Scheme

- Smallest Encapsulated 50W Converter
- Ultra-compact 2" X 1" Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 92%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload/Voltage/Temp. and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKW50-12S033	12 (9 - 18)	3.3	10,000	89%
MKW50-12S05		5	10,000	90%
MKW50-12S12		12	4,170	91%
MKW50-12S15		15	3,330	91%
MKW50-12S24		24	2,080	91%
MKW50-24S033	24 (18 - 36)	3.3	10,000	89%
MKW50-24S05		5	10,000	92%
MKW50-24S12		12	4,170	92%
MKW50-24S15		15	3,330	92%
MKW50-24S24		24	2,080	91%
MKW50-48S033	48 (36 - 75)	3.3	10,000	89%
MKW50-48S05		5	10,000	92%
MKW50-48S12		12	4,170	92%
MKW50-48S15		15	3,330	92%
MKW50-48S24		24	2,080	91%

*To order the converter with heatsink, please add a suffix –HS.

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	-Vin
3	Remote On/Off
4	+Vout
5	-Vout
6	Trim

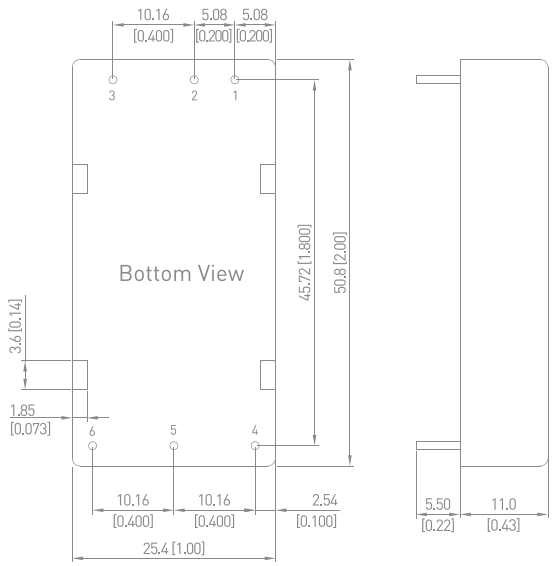
MKWI50 Series | 50W

UL 62368-1 Scheme

- Smallest Encapsulated 50W Converter
- Compact Size of 2" X 1" Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 92%
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload/Voltage/Temp. and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKWI50-24S033	24 (9 - 36)	3.3	10,000	90%
MKWI50-24S05		5	10,000	91%
MKWI50-24S12		12	4,170	92%
MKWI50-24S15		15	3,330	92%
MKWI50-24S24		24	2,080	91%
MKWI50-48S033	48 (18 - 75)	3.3	10,000	90%
MKWI50-48S05		5	10,000	91%
MKWI50-48S12		12	4,170	92%
MKWI50-48S15		15	3,330	92%
MKWI50-48S24		24	2,080	91%

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	-Vin
3	Remote On/Off
4	+Vout
5	-Vout
6	Trim

NEW

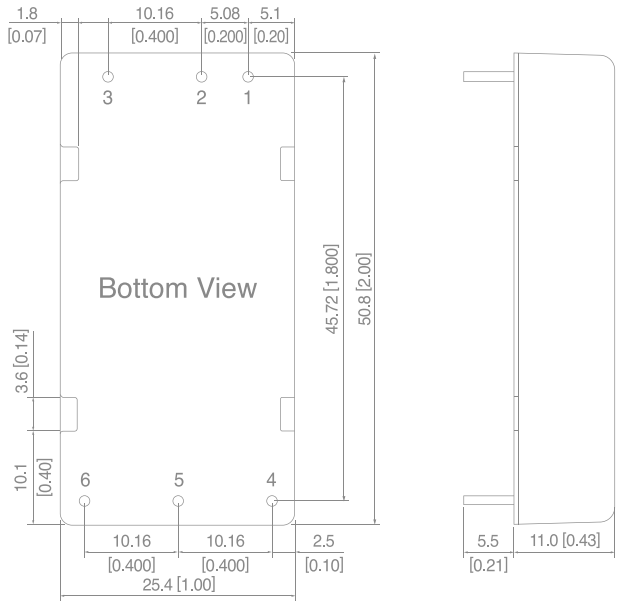
MKWI80 Series | 80W

UL 62368-1 Scheme

- Smallest Encapsulated 80W Converter
- Ultra-compact 2"×1" Package
- Ultra-high Power Density 93W/in³
- Excellent Efficiency up to 92%
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 1500 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Very Low No Load Power Consumption
- Under-voltage, Overload/Temperature and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Shielded Metal Case with Insulated Baseplate
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKWI80-24S05	24 (9 – 36)	5	16000	91%
MKWI80-24S12		12	6600	92%
MKWI80-24S15		15	5300	92%
MKWI80-24S24		24	3300	92%
MKWI80-24S48		48	1670	92%
MKWI80-24S54		54	1480	92%
MKWI80-24D12		±12	±3300	92%
MKWI80-24D15		±15	±2660	92%
MKWI80-48S05	48 (18 – 75)	5	16000	91%
MKWI80-48S12		12	6600	92%
MKWI80-48S15		15	5300	92%
MKWI80-48S24		24	3300	92%
MKWI80-48S48		48	1670	92%
MKWI80-48S54		54	1480	92%
MKWI80-48D12		±12	±3300	92%
MKWI80-48D15		±15	±2660	92%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	Remote On/Off	Remote On/Off
4	+Vout	+Vout
5	-Vout	Common
6	Trim	-Vout

NC= No Connection

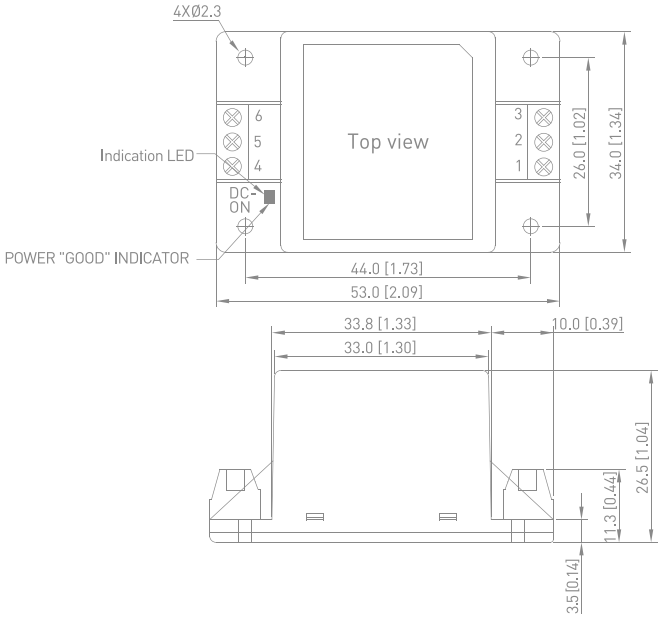
MJWI06C Series | 6W

UL 62368-1

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- High Efficiency up to 85%
- I/O Isolation 3000 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- EMI Emission EN 55032 Class A Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJWI06-24S05C	24 (9 - 36)	5	1,200	81%
MJWI06-24S051C		5.1	1,200	81%
MJWI06-24S12C		12	500	84%
MJWI06-24S15C		15	400	84%
MJWI06-24S24C		24	250	85%
MJWI06-24S48C		48	125	83%
MJWI06-24D12C		±12	±250	84%
MJWI06-24D15C		±15	±200	85%
MJWI06-24D24C		±24	±125	84%
MJWI06-48S05C	48 (18 - 75)	5	1,200	80%
MJWI06-48S051C		5.1	1,200	80%
MJWI06-48S12C		12	500	84%
MJWI06-48S15C		15	400	84%
MJWI06-48S24C		24	250	85%
MJWI06-48S48C		48	125	83%
MJWI06-48D12C		±12	±250	85%
MJWI06-48D15C		±15	±200	85%
MJWI06-48D24C		±24	±125	84%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2	-Vin	-Vin
3	+Vin	+Vin
4	-Vout	-Vout
5	NC	Common
6	+Vout	+Vout

NC= No Connection

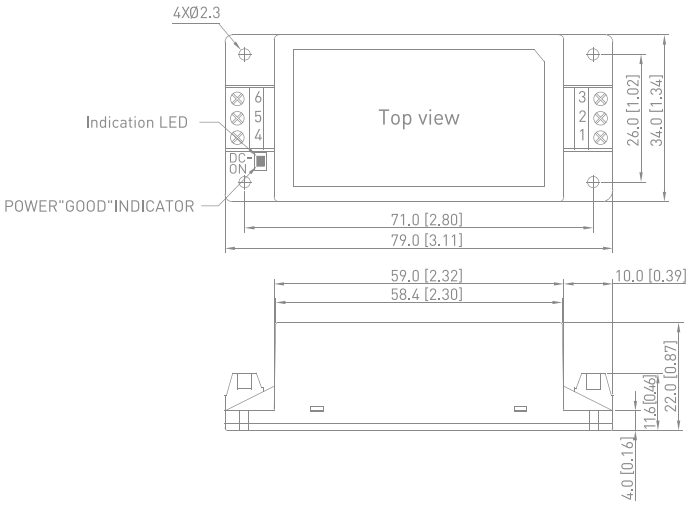
MKWI10C Series | 10W

UL 62368-1

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- High Efficiency up to 86%
- I/O Isolation 3000 VDC
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- EMI Emission EN 55032 Class A Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKWI10-24S05C	24 (9 - 36)	5	2,000	84%
MKWI10-24S051C		5.1	2,000	84%
MKWI10-24S12C		12	833	86%
MKWI10-24S15C		15	666	86%
MKWI10-24S24C		24	416	86%
MKWI10-24S48C		48	208	84%
MKWI10-24D12C		±12	±416	86%
MKWI10-24D15C		±15	±333	86%
MKWI10-24D24C		±24	±208	85%
MKWI10-48S05C	24 (18 - 36)	5	2,000	84%
MKWI10-48S051C		5.1	2,000	84%
MKWI10-48S12C		12	833	86%
MKWI10-48S15C		15	666	86%
MKWI10-48S24C		24	416	86%
MKWI10-48S48C		48	208	84%
MKWI10-48D12C		±12	±416	86%
MKWI10-48D15C		±15	±333	86%
MKWI10-48D24C		±24	±208	85%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2	-Vin	-Vin
3	+Vin	+Vin
4	-Vout	-Vout
5	NC	Common
6	+Vout	+Vout

NC: No Connection

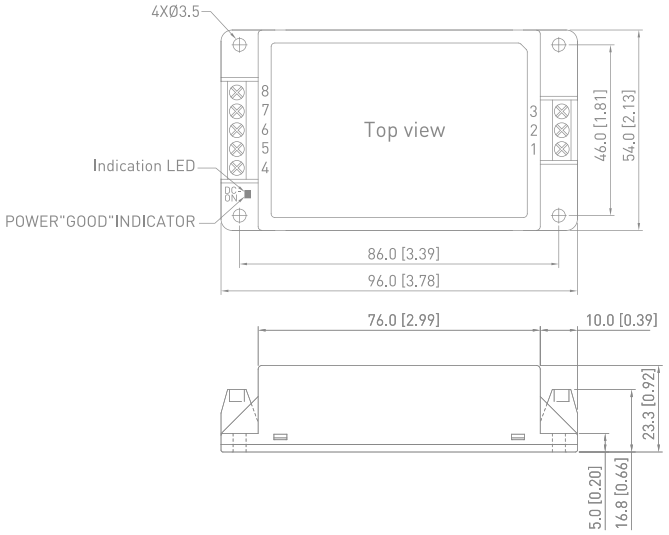
MOWI20C Series | 20W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MOWI20-24S051C	24 (9 - 36)	5.1	4,000	90%
MOWI20-24S12C		12	1,670	91%
MOWI20-24S24C		24	835	91%
MOWI20-24S48C		48	420	89%
MOWI20-48S051C	48 (18 - 75)	5.1	4,000	90%
MOWI20-48S12C		12	1,670	91%
MOWI20-48S24C		24	835	91%
MOWI20-48S48C		48	420	89%

UL 62368-1 Scheme

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 91%
- I/O Isolation 2500 VDC
- Wide Operating Temperature Range
- Under-voltage, Overload/Voltage and Short Circuit Protection
- No Min. Load Requirement
- Remote On/Off Control
- Conducted EMI EN 55032 Class A Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Function
1	Remote On/Off
2	-Vin
3	+Vin
4	NC
5	-Vout
6	NC
7	+Vout
8	NC

NC= No Connection

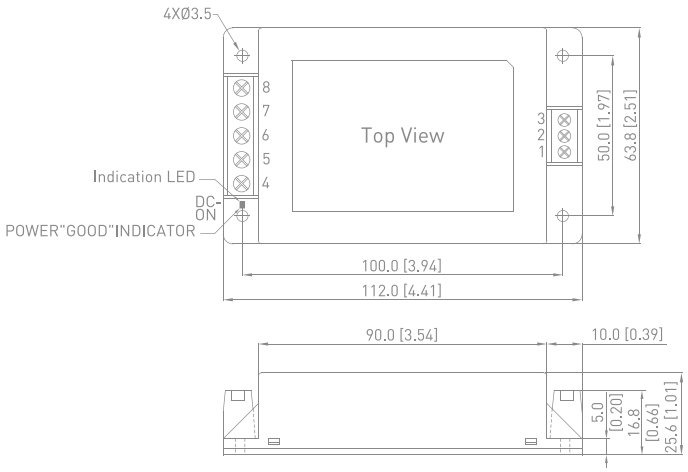
MQWI40C Series | 40W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MQWI40-24S051C	24 (9 - 36)	5.1	8,000	90%
MQWI40-24S12C		12	3,330	90%
MQWI40-24S24C		24	1,670	90%
MQWI40-24S48C		48	835	89%
MQWI40-48S051C	48 (18 - 75)	5.1	8,000	89%
MQWI40-48S12C		12	3,330	91%
MQWI40-48S24C		24	1,670	92%
MQWI40-48S48C		48	835	90%

UL 62368-1 Scheme

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 92%
- I/O Isolation 2500 VDC
- Wide Operating Temperature Range
- Under-voltage, Overload/Voltage and Short Circuit Protection
- No Min. Load Requirement
- Remote On/Off Control
- Conducted EMI EN 55032 Class A Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Function
1	Remote On/Off
2	-Vin
3	+Vin
4	+Vout
5	NC
6	-Vout
7	NC
8	NC

NC= No Connection

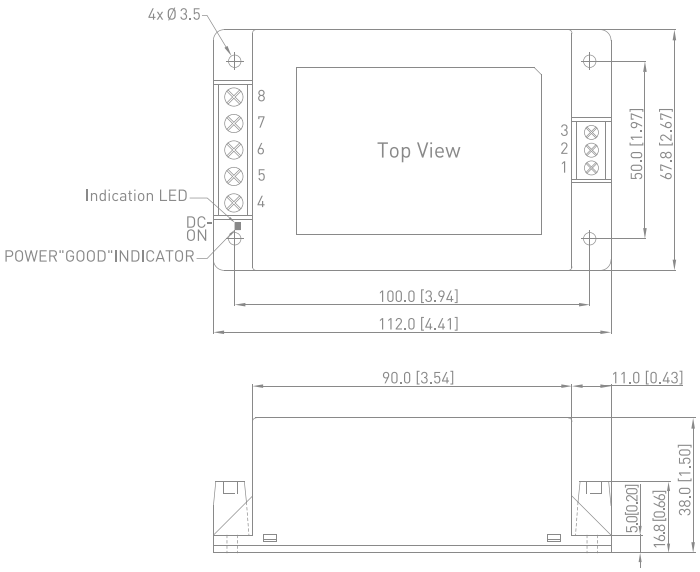
MRWI60C Series | 60W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MRWI60-24S051C	24 (9 - 36)	5.1	12,000	90%
MRWI60-24S12C		12	5,000	91%
MRWI60-24S24C		24	2,500	91%
MRWI60-24S48C		48	1,250	91%
MRWI60-48S051C	48 (18 - 75)	5.1	12,000	91%
MRWI60-48S12C		12	5,000	92%
MRWI60-48S24C		24	2,500	91%
MRWI60-48S48C		48	1,250	91%

UL 62368-1 Scheme

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Excellent Efficiency up to 92%
- I/O Isolation 2500 VDC
- Wide Operating Temperature Range
- Under-voltage, Overload/Voltage and Short Circuit Protection
- No Min. Load Requirement
- Remote On/Off Control
- Conducted EMI EN 55032 Class A Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Function
1	Remote On/Off
2	-Vin
3	+Vin
4	NC
5	+Vout
6	NC
7	-Vout
8	NC

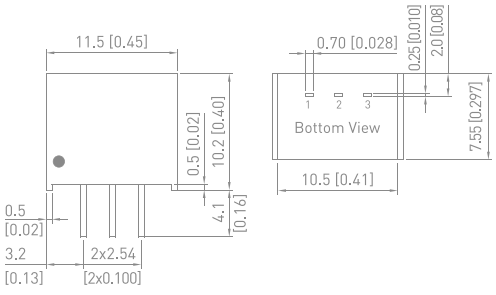
NC= No Connection

M78AR-0.5 Series | 0.5A

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
M78AR015-0.5	4.75 - 32	1.5	500	63%
M78AR018-0.5		1.8	500	71%
M78AR025-0.5		2.5	500	77%
M78AR033-0.5		3.3	500	81%
M78AR05-0.5	6.5 - 32	5	500	86%
M78AR065-0.5	8 - 32	6.5	500	88%
M78AR09-0.5	11 - 32	9	500	92%
M78AR12-0.5	15 - 32	12	500	94%
M78AR15-0.5	18 - 32	15	500	95%

- Industrial Standard SIP-3 Package
- Pin-out compatible with LM78xx Linear Regulators
- Fully Regulated Output Voltage
- Low Ripple & Noise
- Excellent Efficiency up to 97%
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Over Temp. and Short Circuit Protection

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	GND
3	+Vout

M78SAR-0.5 Series | 0.5A

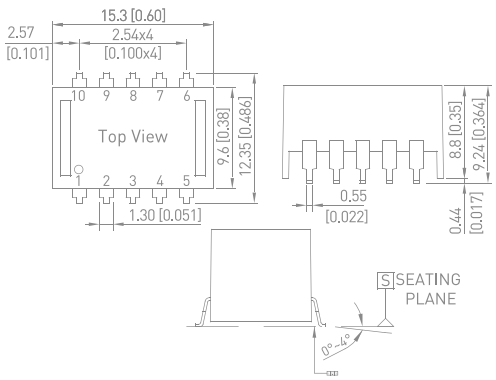
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
M78SAR015-0.5	4.75 - 32	1.5	500	63%
M78SAR018-0.5		1.8	500	71%
M78SAR025-0.5		2.5	500	77%
M78SAR033-0.5		3.3	500	81%
M78SAR05-0.5	6.5 - 32	5	500	86%
M78SAR065-0.5	8 - 32	6.5	500	88%
M78SAR09-0.5	11 - 32	9	500	92%
M78SAR12-0.5	15 - 32	12	500	94%
M78SAR15-0.5	18 - 32	15	500	95%

- Industrial SMD Package
- Fully Regulated Output Voltage
- Low Ripple & Noise
- Excellent Efficiency up to 97%
- Wide Operating Temperature Range
- No Min. Load Requirement
- Over Temp. and Short Circuit Protection
- Remote ON/OFF Control, Output Voltage Trim
- Qualified for Lead-free Reflow Solder Process

According to IPC/JEDEC J-STD-020D.1

- Tape & Reel Package Available

Mechanical Dimensions



Pin Connections

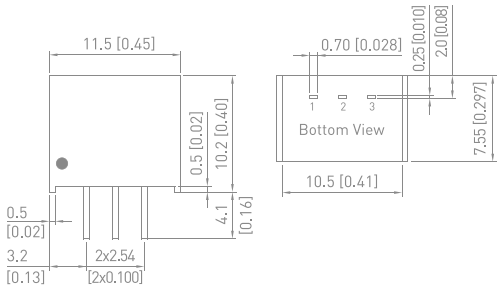
Pin	Function
1	+Vin
2	+Vin
3	GND
4	+Vout
5	+Vout
6	Vadj.
7	GND
8	GND
9	GND
10	Remote On/Off

M78AR-1 Series | 1A

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
M78AR033-1	6.5 - 32	3.3	1,000	87%
M78AR05-1	6.5 - 32	5	1,000	90%
M78AR12-1	6.5 - 32	12	1,000	94%

- Industrial Standard SIP-3 Package
- Pin-out compatible with LM78xx Linear Regulators
- Fully Regulated Output Voltage
- Low Ripple & Noise
- Excellent Efficiency up to 96%
- Wide Operating Temperature Range
- Low No Load Power Consumption
- No Min. Load Requirement
- Over Temp. and Short Circuit Protection

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	GND
3	+Vout

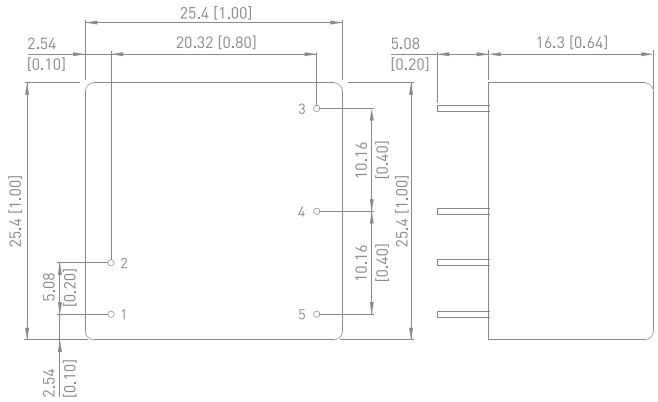
AAF-03 Series | 3W

Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
AAF-03S03	85-264VAC 120-370VDC	3.3	900	70%
AAF-03S05		5	600	72%
AAF-03S09		9	333	77%
AAF-03S12		12	250	78%
AAF-03S15		15	200	78%
AAF-03S24		24	125	78%

UL 62368-1

- Ultra Compact Size 1.0" x 1.0" x 0.64"
- Fully Encapsulated Plastic Case for PCB Mounting
- Universal Input 85-264VAC
- I/O Isolation 3000VAC with Reinforced Insulation
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55032/14-1 Class B Approved
- EMS Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- Eco Design, Low No Load Power Consumption ← 150mW
- UL/cUL/IEC/EN 62368-1(60950-1), TUV/IEC/EN 60335-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Function
1	AC Netural
2	AC Line
3	NC
4	-Vout
5	+Vout

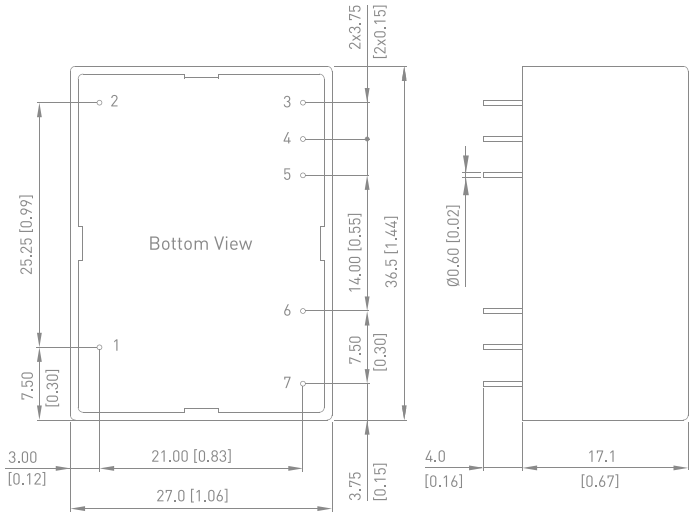
ABF-04 Series | 4W

UL 62368-1

Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
ABF-04S03	85-264VAC 120-370VDC	3.3	1,200	70%
ABF-04S05		5	800	72%
ABF-04S09		9	444	75%
ABF-04S12		12	333	76%
ABF-04S15		15	267	76%
ABF-04S24		24	167	77%
ABF-04D53		+5	600	72%
		+3.3	150	
ABF-04D125		+12	250	75%
		+15	120	
ABF-04D12		±12	±166	77%
ABF-04D15		±15	±133	77%

- Fully Encapsulated Plastic Case for PCB Mounting
- Universal Input 85-264VAC, 47-440Hz
- I/O Isolation 3000VAC with Reinforced Insulation
- Wide Operating Temperature Range
- No Min. Load Requirement
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN55032 Class B Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- Eco Design, Compliant to Energy Star Specification and ErP Directive 2009/125/EC
- UL/cUL/IEC/EN (62368-1)60950-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Single	D12/D15	D53/D125
1	NC		
2	NC		
3	+Vout	+Vout	+Vout1
4	-Vout	Common	Common
5	No Pin	-Vout	+Vout2
6	AC Netural		
7	AC Line		

NC: No Connection

AAF-05 Series | 5W

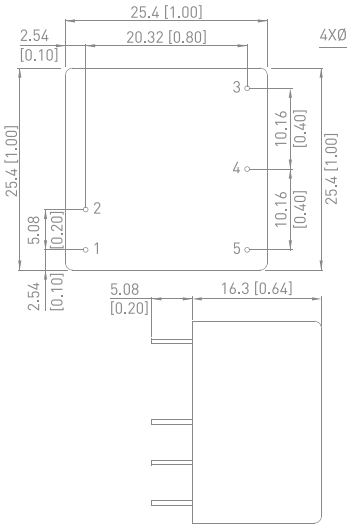
Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
AAF-05S03	85-264VAC 120-370VDC	3.3	1,515	74%
AAF-05S05		5	1,000	80%
AAF-05S09		9	555	82%
AAF-05S12		12	416	82%
AAF-05S15		15	333	83%
AAF-05S24		24	208	83%
AAF-05S48		48	104	85%

UL 62368-1

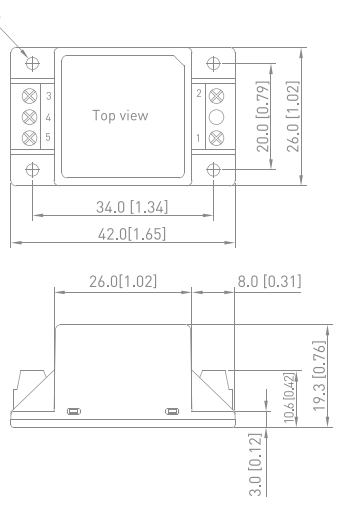
- Ultra Compact Size 1.0 x 1.0 x 0.64"
- Fully Encapsulated Plastic Case for PCB and Chassis Mounting Version
- Universal Input 85-264VAC
- I/O Isolation 3000VAC with Reinforced Insulation
- No Min. Load Requirement
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55032/14-1 Class B Approved
- EMS Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- Eco Design, No Load Input Power 300mW max.
- Safety Approval to UL/cUL/IEC/EN 62368-1(60950-1), TUV IEC/EN 60335-1 & CE Marking

Mechanical Dimensions

PCB



Chassis



Pin Connections

Pin	Function
1	AC Netural
2	AC Line
3	NC
4	-Vout
5	+Vout

NC= No Connection

AMF-07 Series | 7W

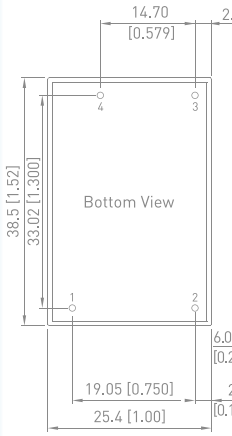
Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
AMF-07S05	85-264VAC 90-370VDC	5	1,400	80%
AMF-07S12		12	585	84%
AMF-07S15		15	467	84%
AMF-07S24		24	292	85%
AMF-07S48		48	146	84%

UL 62368-1

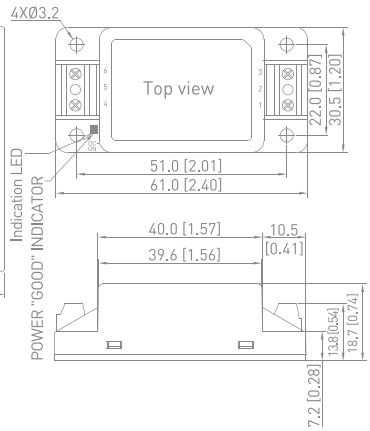
- Ultra Compact Size 1.52x1.00x0.66"
- Fully Encapsulated Plastic Case for PCB and Chassis Mounting Version
- Universal Input 85-264VAC, 90-370VDC, 47-440Hz
- I/O Isolation 3000VAC with Reinforced Insulation
- No Min. Load Requirement & Low no-load power consumption
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN55014-1/55032 Class B Approved
- EMS Immunity EN61000-4-2,3,4,5,6,8,11 Approved
- Safety Approval to UL/cUL/IEC/EN 62368-1, IEC/EN 60335-1 & CE Marking

Mechanical Dimensions

PCB



Chassis



Pin Connections

Pin	PCB	Chassis
1	AC Netural	AC Netural
2	AC Line	No Pin
3	-Vout	AC Line
4	+Vout	-Vout
5	-	No Pin
6	-	+Vout

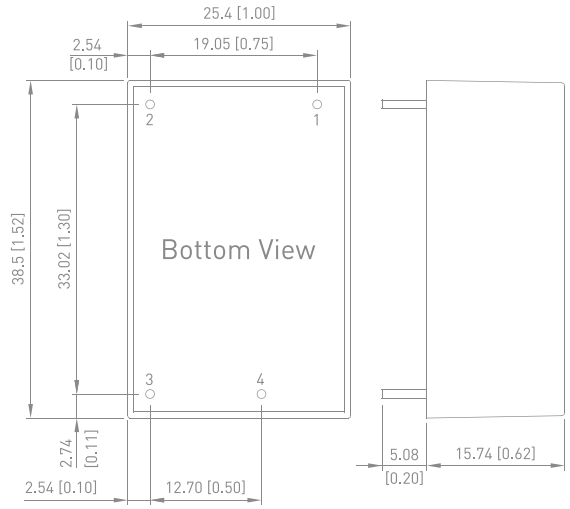
ACF-10 Series | 10W

Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
ACF-10S03	85-264VAC 120-370VDC	3.3	2,600	77%
ACF-10S05		5	2,000	80%
ACF-10S09		9	1,100	83%
ACF-10S12		12	830	84%
ACF-10S15		15	660	84%
ACF-10S24		24	410	86%
ACF-10S48		48	210	84%

UL 62368-1 TUV 60335-1 CB Scheme RoHS Compliant

- Ultra Compact Size 1.5 x 1.0 x 0.6"
- Fully Encapsulated Module for PCB Mounting
- Universal Input 85-264VAC, 47-440Hz
- I/O Isolation 4000VAC with Reinforced Insulation
- No Min. Load Requirement
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55032/14-1 Class B Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- Eco Design, Low No Load Power Consumption← 150mW
- Safety Approval to UL/cUL/IEC/EN 62368-1(60950-1), TUV IEC/EN 60335-1 & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Function
1	AC Netural
2	AC Line
3	-Vout
4	+Vout

AMF-15 Series | 15W

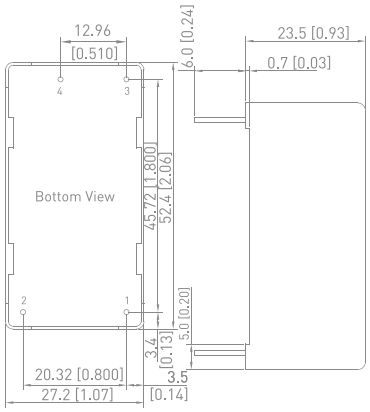
Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
AMF-15S051	85-264VAC 90-370VDC	5.1	3,000	80%
AMF-15S12		12	1,250	85%
AMF-15S15		15	1,000	86%
AMF-15S24		24	625	86%
AMF-15S48		48	313	86%

UL 62368-1

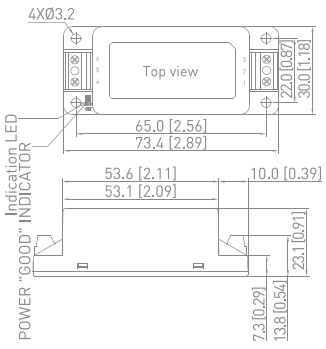
- Ultra Compact Size 2.52x1.77x0.94 "
- Fully Encapsulated Plastic Case for PCB, Chassis and DIN-Rail Mounting Version
- Universal Input 85-264VAC, 90-370VDC, 47-440Hz
- I/O Isolation 3000VAC with Reinforced Insulation
- No Min. Load Requirement & Low no-load power consumption
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN55014-1/55032 Class B Approved
- EMS Immunity EN61000-4-2,3,4,5,6,8,11 Approved
- Safety Approval to UL/cUL/IEC/EN 62368-1, IEC/EN 60335-1 & CE Marking

Mechanical Dimensions

PCB



Chassis



Pin Connections

Pin	PCB	Chassis
1	AC Netural	AC Netural
2	AC Line	No Pin
3	-Vout	AC Line
4	+Vout	+Vout
5	-	No Pin
6	-	-Vout

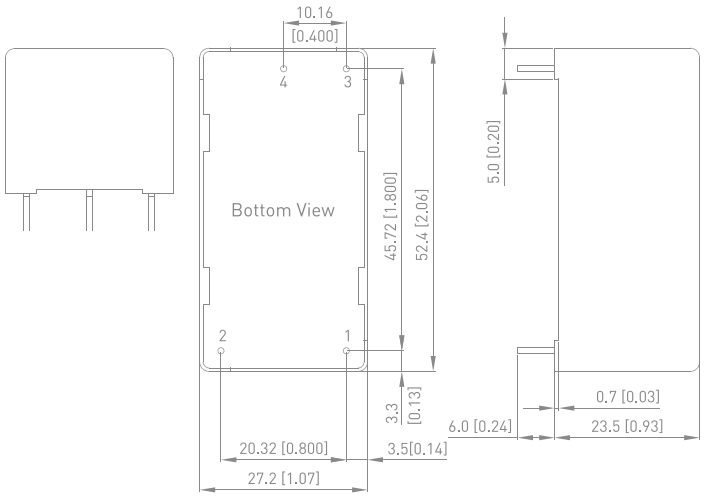
AGF-15 Series | 15W

Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
AGF-15S033	85-264VAC 120-370VDC	3.3	3,500	75%
AGF-15S05		5	3,000	79%
AGF-15S09		9	1,667	81%
AGF-15S12		12	1,250	82%
AGF-15S15		15	1,000	82%
AGF-15S24		24	625	84%
AGF-15S48		48	313	82%

UL 62368-1 TUV 60335-1 CB Scheme RoHS Compliant

- Ultra Compact Size 2.06 x 1.07 x 0.93"
- Fully Encapsulated Module for PCB Mounting
- Universal Input 85-264VAC, 47-440Hz
- I/O Isolation 3000VAC with Reinforced Insulation
- No Min. Load Requirement
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55032/14-1 Class B Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- Eco Design, Low No Load Power Consumption ← 100mW
- UL/cUL/IEC/EN 62368-1(60950-1), TUV IEC/EN 60335-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Function
1	AC Netural
2	AC Line
3	+Vout
4	-Vout

NEW

AMF-30 Series | 30W

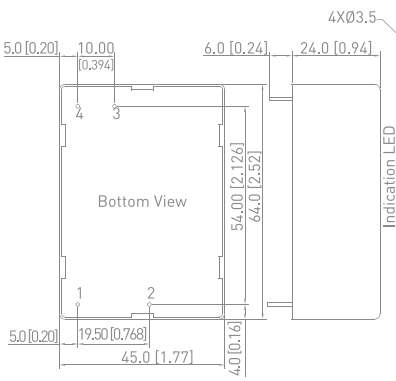
Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
AMF-30S051	85-264VAC 90-370VDC	5.1	5,000	86%
AMF-30S12		12	2,500	88%
AMF-30S15		15	2,000	88%
AMF-30S24		24	1,250	88%
AMF-30S48		48	625	88%

UL 62368-1

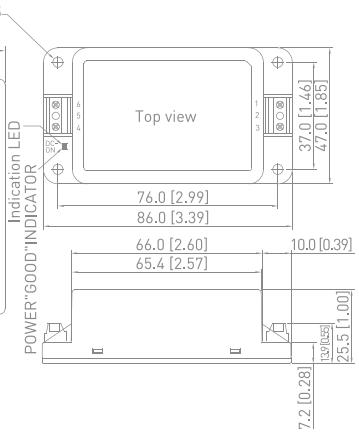
- Ultra Compact Size 2.52x1.77x0.94 "
- Fully Encapsulated Plastic Case for PCB, Chassis and DIN-Rail Mounting Version
- Universal Input 85-264VAC, 90-370VDC, 47-440Hz
- I/O Isolation 3000VAC with Reinforced Insulation
- No Min. Load Requirement & Low no-load power consumption
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN55014-1/55032 Class B Approved
- EMS Immunity EN61000-4-2,3,4,5,6,8,11 Approved
- Safety Approval to UL/cUL/IEC/EN 62368-1, IEC/EN 60335-1 & CE Marking

Mechanical Dimensions

PCB



Chassis



Pin Connections

Pin	PCB	Chassis
1	AC Line	AC Line
2	AC Netural	No Pin
3	+Vout	AC Netural
4	-Vout	+Vout
5	-	No Pin
6	-	-Vout

AMF-60 Series 60W

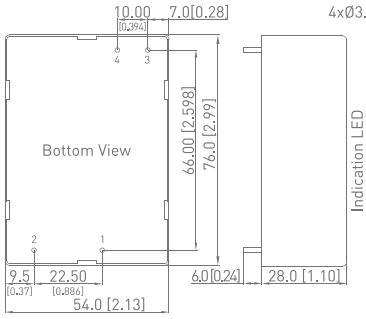
UL 62368-1

- Ultra Compact Size 2.99x2.13x1.10 "
- Fully Encapsulated Plastic Case for PCB, Chassis and DIN-Rail Mounting Version
- Universal Input 85-264VAC, 90-370VDC, 47-440Hz
- I/O Isolation 3000VAC with Reinforced Insulation
- No Min. Load Requirement & Low no-load power consumption
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN55014-1/55032 Class B Approved
- EMC Immunity EN61000-4-2,3,4,5,6,8,11 Approved
- Safety Approval to UL/cUL/IEC/EN 62368-1, IEC/EN 60335-1 & CE Marking

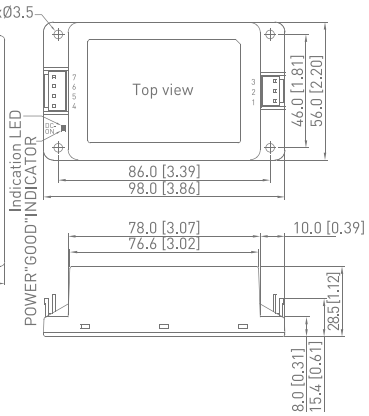
Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
AMF-60S051	85-264VAC 90-370VDC	5.1	10,000	87%
AMF-60S12		12	5,000	89%
AMF-60S15		15	4,000	89%
AMF-60S24		24	2,500	89%
AMF-60S48		48	1,250	89%

Mechanical Dimensions

PCB



Chassis



Pin Connections

Pin	PCB	Chassis
1	AC Line	AC Line
2	AC Netural	No Pin
3	-Vout	AC Netural
4	+Vout	-Vout
5	-	-Vout
6	-	+Vout
7	-	+Vout

POWER FOR
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RAILWAY CERTIFIED POWER SOLUTIONS

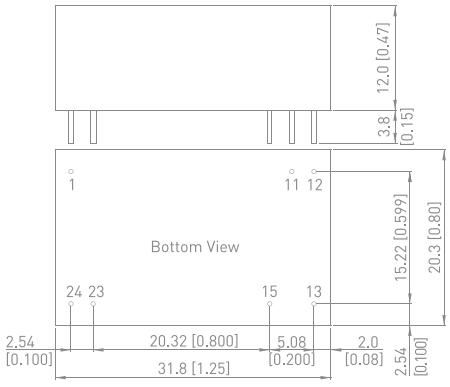
MINMAX TECHNOLOGY

MIZI03 Series | 3W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIZI03-24S05	24 (9 - 36)	5	600	80%
MIZI03-24S12		12	250	84%
MIZI03-24S15		15	200	85%
MIZI03-24D12		±12	±125	83%
MIZI03-24D15		±15	±100	84%
MIZI03-48S05	48 (18 - 75)	5	600	80%
MIZI03-48S12		12	250	83%
MIZI03-48S15		15	200	84%
MIZI03-48D12		±12	±125	83%
MIZI03-48D15		±15	±100	83%
MIZI03-110S05	110 (40 - 160)	5	600	80%
MIZI03-110S12		12	250	84%
MIZI03-110S15		15	200	84%
MIZI03-110D12		±12	±125	83%
MIZI03-110D15		±15	±100	85%

- Industrial Standard DIP-24 Package
- Ultra-wide Input Ranges 9-36VDC, 18-75VDC, 40-160VDC
- I/O Isolation 3000VAC with Reinforced Insulation
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-Voltage, Overload and Short Circuit Protection
- EMI Emission EN 55032/11 Class A Approved
- Vibration and Shock/Bump Test EN 61373 Approved
- Cooling, Dry & Damp Heat Test IEC/EN 60068-2-1, 2, 30 Approved
- Railway EMC Standard EN 50121-3-2 Approved
- Railway Certified EN 50155 (IEC60571) Approved
- Fire Protection Test EN 45545-2 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

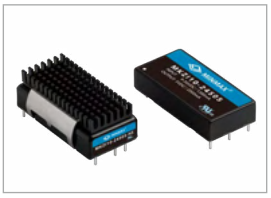
Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

MKZI10 Series | 10W



- Industrial Standard 2"×1" Package
- Ultra-wide Input Range 9-36VDC, 18-75VDC, 40-160VDC
- I/O Isolation 3000VAC with Reinforced Insulation
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- Remote On/Off, Output Voltage Trim
- Conducted EMI EN 55032/11 Class A Approved
- Passed Temperature Cycling Test (TCT) 500 cycles (with suffix P)
- Passed Temperature and Humidity Bias Test (THB) for 1000 hours (with suffix P)
- Vibration and Shock/Bump Test EN 61373 Approved
- Cooling, Dry & Damp Heat Test IEC/EN 60068-2-1, 2, 30 Approved
- Railway EMC Standard EN 50121-3-2 Approved
- Railway Certified EN 50155 (IEC60571) Approved
- Fire Protection Test EN 45545-2 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

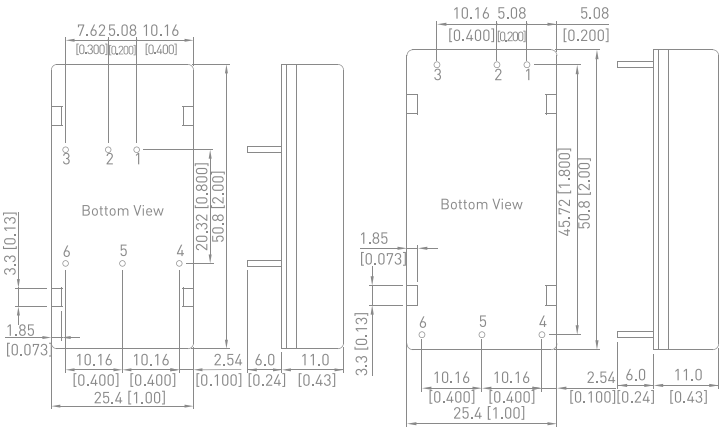
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKZI10-24S05	24 (9 - 36)	5	2,000	84%
MKZI10-24S12		12	835	86%
MKZI10-24S15		15	670	87%
MKZI10-24S24		24	417	88%
MKZI10-24D12		±12	±417	86%
MKZI10-24D15		±15	±335	87%
MKZI10-48S05	48 (18 - 75)	5	2,000	85%
MKZI10-48S12		12	835	87%
MKZI10-48S15		15	670	87%
MKZI10-48S24		24	417	86%
MKZI10-48D12		±12	±417	89%
MKZI10-48D15		±15	±335	88%
MKZI10-110S05	110 (40 - 160)	5	2,000	82%
MKZI10-110S12		12	835	85%
MKZI10-110S15		15	670	85%
MKZI10-110S24		24	417	85%
MKZI10-110D12		±12	±417	86%
MKZI10-110D15		±15	±335	86%

*To order the converter with heatsink, please add a suffix –HS.

*To order the converter with package type A, please add a suffix A.

Mechanical Dimensions

Package Type A



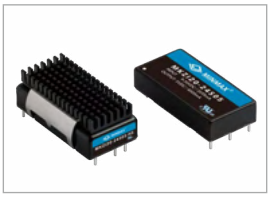
Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	Remote On/Off	Remote On/Off
4	+Vout	+Vout
5	Trim	Common
6	-Vout	-Vout

Pin Connections(For Type A)

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	Remote On/Off	Remote On/Off
4	+Vout	+Vout
5	-Vout	Common
6	Trim	-Vout

MKZI20 Series | 20W



- Industrial Standard 2"x1" Package
- Ultra-wide Input Range 9-36VDC, 18-75VDC, 40-160VDC
- I/O Isolation 3000VAC with Reinforced Insulation
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- Remote On/Off, Output Voltage Trim
- Conducted EMI EN 55032/11 Class A Approved
- Passed Temperature Cycling Test (TCT) 500 cycles (with suffix P)
- Passed Temperature and Humidity Bias Test (THB) for 1000 hours (with suffix P)
- Vibration and Shock/Bump Test EN 61373 Approved
- Cooling, Dry & Damp Heat Test IEC/EN 60068-2-1, 2, 30 Approved
- Railway EMC Standard EN 50121-3-2 Approved
- Railway Certified EN 50155 (IEC60571) Approved
- Fire Protection Test EN 45545-2 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

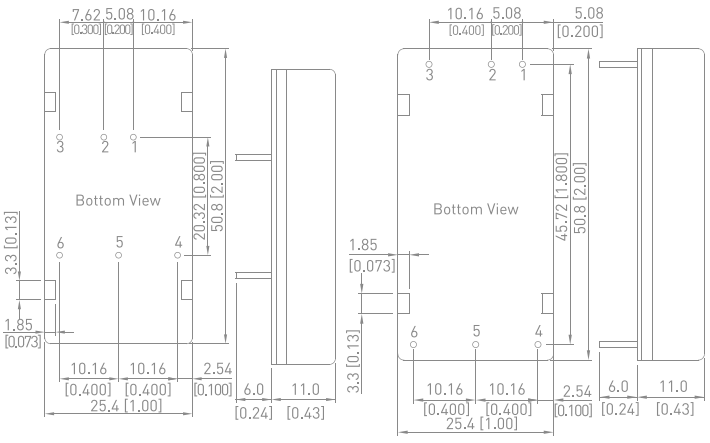
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKZI20-24S05	24 (9 - 36)	5	4,000	87%
MKZI20-24S12		12	1,670	87%
MKZI20-24S15		15	1,330	87%
MKZI20-24S24		24	833	87%
MKZI20-24D12		±12	±833	86%
MKZI20-24D15		±15	±667	86%
MKZI20-48S05	48 (18 - 75)	5	4,000	87%
MKZI20-48S12		12	1,670	88%
MKZI20-48S15		15	1,330	88%
MKZI20-48S24		24	833	88%
MKZI20-48D12		±12	±833	87%
MKZI20-48D15		±15	±667	87%
MKZI20-110S05	110 (40 - 160)	5	4,000	84%
MKZI20-110S12		12	1,670	86%
MKZI20-110S15		15	1,330	86%
MKZI20-110S24		24	833	86%
MKZI20-110D12		±12	±833	86%
MKZI20-110D15		±15	±667	86%

*To order the converter with heatsink, please add a suffix –HS.

*To order the converter with package type A, please add a suffix A.

Mechanical Dimensions

Package Type A



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	Remote On/Off	Remote On/Off
4	+Vout	+Vout
5	Trim	Common
6	-Vout	-Vout

Pin Connections(For Type A)

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	Remote On/Off	Remote On/Off
4	+Vout	+Vout
5	-Vout	Common
6	Trim	-Vout

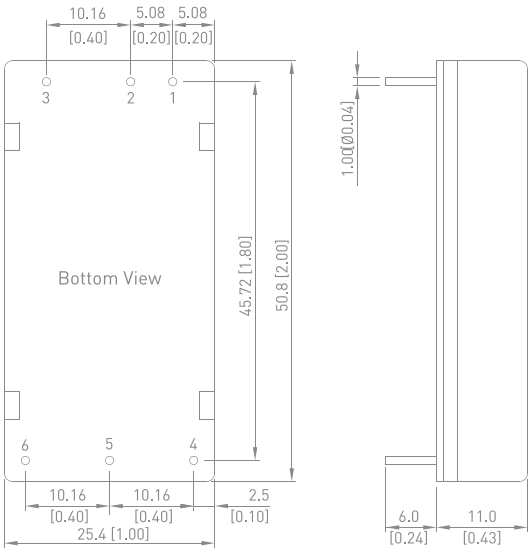
MKZI40 Series | 40W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKZI40-110S05	110 (36 - 160)	5	8,000	88%
MKZI40-110S12		12	3,330	89%
MKZI40-110S15		15	2,670	89%
MKZI40-110S24		24	1,670	89%
MKZI40-110S54		54	741	90%
MKZI40-110D12		±12	±1670	89%
MKZI40-110D15		±15	±1330	89%

*To order the converter with heatsink, please add a suffix –HS.

- Industrial Standard 2"×1" Package
- Ultra-wide Input Range 36-160VDC
- I/O Isolation 3000VAC with Reinforced Insulation
- Excellent Efficiency up to 90%
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim
- Vibration and Shock/Bump Test EN 61373 Approved
- Cooling, Dry & Damp Heat Test IEC/EN 60068-2-1, 2, 30 Approved
- Railway EMC Standard EN 50121-3-2 Approved
- Railway Certified EN 50155 (IEC60571) Approved
- Fire Protection Test EN 45545-2 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	Remote On/Off	Remote On/Off
4	+Vout	+Vout
5	-Vout	Common
6	Trim	-Vout

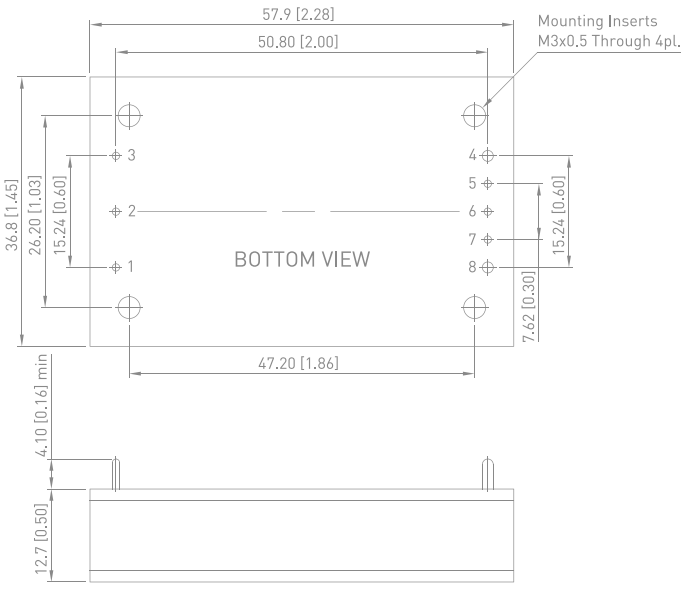
MTQZ50 Series | 50W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MTQZ50-72S05	72 (43 - 101)	5	10,000	90%
MTQZ50-72S12		12	4,170	92%
MTQZ50-72S15		15	3,330	92%
MTQZ50-72S24		24	2,080	91%
MTQZ50-110S05	110 (66 - 160)	5	10,000	90%
MTQZ50-110S12		12	4,170	91%
MTQZ50-110S15		15	3,330	92%
MTQZ50-110S24		24	2,080	91%

*To order the converter with heatsink, please add a suffix –HS.

- Industrial Standard Quarter Brick Package
- Wide Input Range 43-101VDC & 66-160VDC
- Excellent Efficiency up to 92%
- I/O Isolation 3000VAC with Reinforced Insulation
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage/Temp. and Short Circuit Protection
- Remote On/Off, Output Voltage Trim, Output Sensing
- Vibration and Shock/Bump Test EN 61373 Approved
- Cooling, Dry & Damp Heat Test IEC/EN 60068-2-1, 2, 30 Approved
- Railway EMC Standard EN 50121-3-2 Approved
- Railway Certified EN 50155 (IEC60571) Approved
- Fire Protection Test EN 45545-2 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Mechanical Dimensions



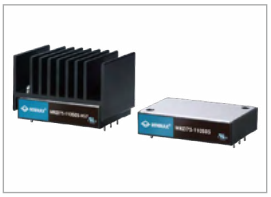
Pin Connections

Pin	Function
1	+Vin
2	Remote On/Off
3	-Vin
4	-Vout
5	* -Sense
6	Trim
7	* +Sense
8	+Vout

*If remote sense not used the +sense should be connected to +output and –sense should be connected to –output
Maximum output deviation is 10% inclusive of trim

NEW

MRZI75 Series | 75W

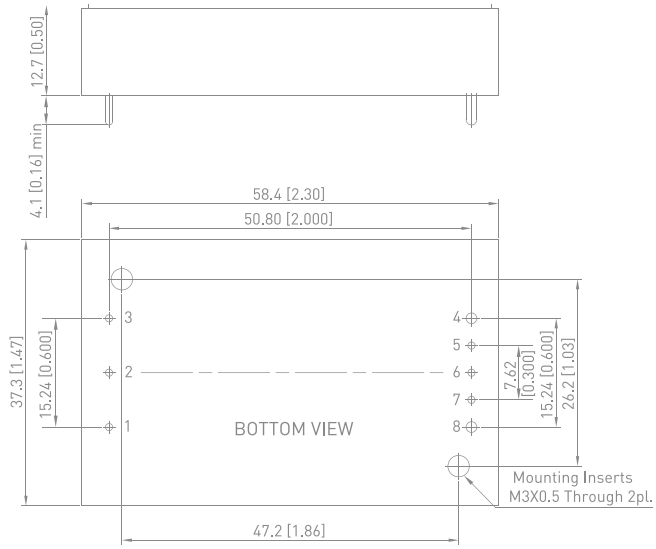


Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MRZI75-110S05	110 (36 - 160)	5	15,000	89%
MRZI75-110S12		12	6,250	91%
MRZI75-110S15		15	5,000	91%
MRZI75-110S24		24	3,125	90%
MRZI75-110S54		54	1,390	89%

*To order the converter with heatsink, please add a suffix –HS.

- Industrial Standard Quarter Brick Package
- Ultra-wide Input Range 36-160VDC
- Excellent Efficiency up to 91%
- I/O Isolation 2000VAC with Reinforced Insulation
- Temperature Cycle Test (TCT) more than 1000 Cycles Passed
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage/Temp. and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim, Output Sense
- Vibration and Shock/Bump Test EN 61373 Approved
- Cooling, Dry & Damp Heat Test IEC/EN 60068-2-1, 2, 30 Approved
- Railway EMC Standard EN 50121-3-2 Approved
- Railway Certified EN 50155 (IEC60571) Approved
- Fire Protection Test EN 45545-2 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	Remote On/Off
3	-Vin
4	-Vout
5	* -Sense
6	Trim
7	* +Sense
8	+Vout

*If remote sense not used the +sense should be connected to +output and –sense should be connected to –output
Maximum output deviation is 10% inclusive of trimection

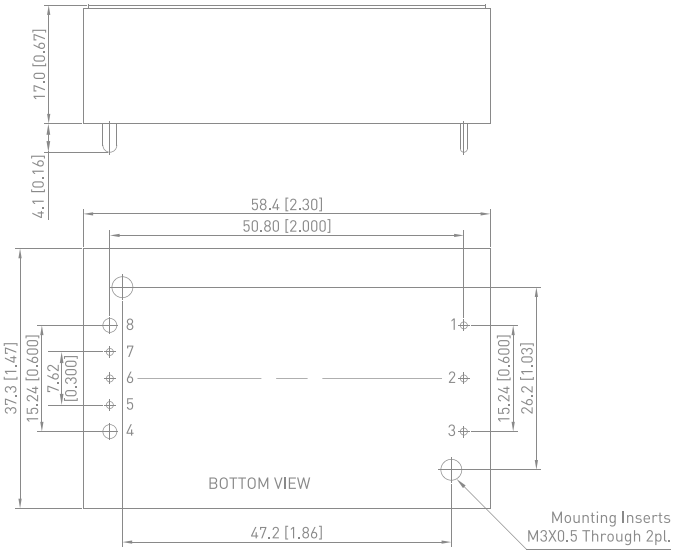
MRZI100 Series | 100W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MRZI100-110S05	110 (36 - 160)	5	20,000	91.5%
MRZI100-110S12		12	8,400	91%
MRZI100-110S15		15	6,700	90.5%
MRZI100-110S24		24	4,200	89%
MRZI100-110S54		54	1,850	89%

*To order the converter with heatsink, please add a suffix –HS.

- Industrial Standard Quarter Brick Package
- Ultra-wide Input Range 36-160VDC
- I/O Isolation 2000VAC with Reinforced Insulation
- Excellent Efficiency up to 91.5%
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage/Temp. and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim, Output Sense
- Vibration and Shock/Bump Test EN 61373 Approved
- Cooling, Dry & Damp Heat Test IEC/EN 60068-2-1, 2, 30 Approved
- Railway EMC Standard EN 50121-3-2 Approved
- Railway Certified EN 50155 (IEC60571) Approved
- Fire Protection Test EN 45545-2 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	Remote On/Off
3	-Vin
4	-Vout
5	* -Sense
6	Trim
7	* +Sense
8	+Vout

*If remote sense not used the +sense should be connected to +output and -sense should be connected to -output
Maximum output deviation is 10% inclusive of trim

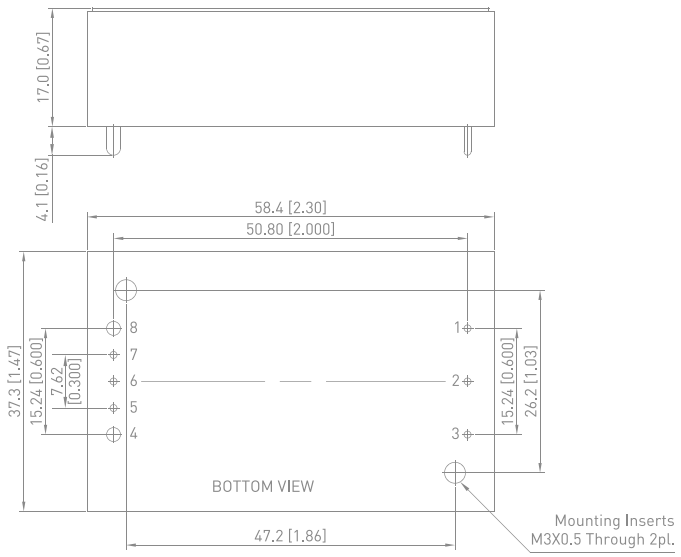
MRZI150 Series | 150W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MRZI150-110S05	110 (36 - 160)	5	27,000	90%
MRZI150-110S12		12	12,500	90%
MRZI150-110S15		15	10,000	89%
MRZI150-110S24		24	6,250	88%
MRZI150-110S54		54	2,780	88.5%

*To order the converter with heatsink, please add a suffix –HS.

- Industrial Standard Quarter Brick Package
- Ultra-wide Input Range 36-160VDC
- I/O Isolation 2000VAC with Reinforced Insulation
- Excellent Efficiency up to 90%
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage/Temp. and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim, Output Sense
- Vibration and Shock/Bump Test EN 61373 Approved
- Cooling, Dry & Damp Heat Test IEC/EN 60068-2-1, 2, 30 Approved
- Railway EMC Standard EN 50121-3-2 Approved
- Railway Certified EN 50155 (IEC60571) Approved
- Fire Protection Test EN 45545-2 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	Remote On/Off
3	-Vin
4	-Vout
5	* -Sense
6	Trim
7	* +Sense
8	+Vout

*If remote sense not used the +sense should be connected to +output and -sense should be connected to -output
Maximum output deviation is 10% inclusive of trim

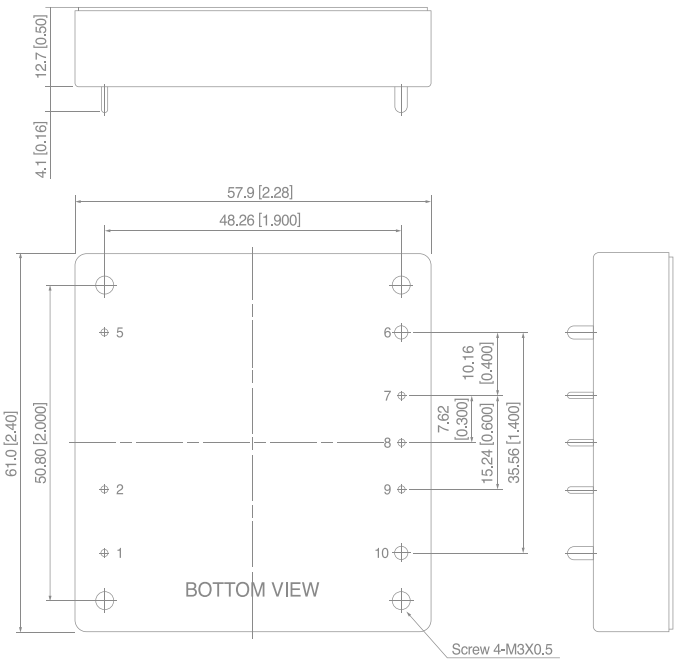
NEW

MRHI150 Series | 150W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MRHI150-24S05	24 (9 - 36)	5	30,000	87.5%
MRHI150-24S12		12	12,500	90%
MRHI150-24S15		15	10,000	90%
MRHI150-24S24		24	6,250	90%
MRHI150-24S54		54	2,780	90%

- Industry standard Half Brick size
- Wide input voltage range 9-36VDC
- Excellent efficiency of 90%
- Reinforced insulation, isolation voltage 1680VAC
- Wide Operating Temperature Range
- Passed Temperature Cycling Test (TCT) 500 cycles
- No minimum load required
- Under-voltage, Overload/Voltage/Temp. and Short Circuit Protection
- Remote On/Off Control, Output Voltage Trim, Output Sense
- Vibration and Shock/Bump Test EN 61373 Approved
- Cooling, Dry & Damp Heat Test IEC/EN 60068-2-1, 2, 30 Approved
- Railway EMC Standard EN 50121-3-2 Approved
- Railway Certified EN 50155 (IEC60571) Approved
- Fire Protection Test EN 45545-2 Approved
- Operating Altitude 5000m
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Mechanical Dimensions



The screw locked torque: MAX 5.0 kgf-cm/0.49 N-m

Pin Connections

Pin	Function
1	+Vin
2	Remote On/Off
5	-Vin
6	-Vout
7	* -Sense
8	Trim
9	* +Sense
10	+Vout

NC: No Connection

*If remote sense not used the +sense should be connected to +output and –sense should be connected to –output

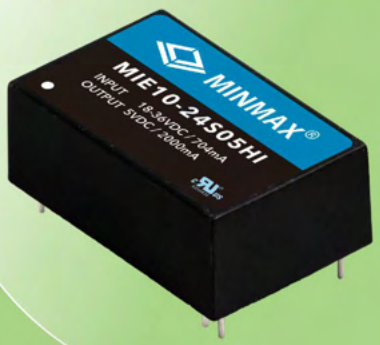
Maximum output deviation is 10% inclusive of trim

POWER FOR
A BETTER FUTURE

ULTRA-HIGH ISOLATION POWER SOLUTIONS

Isolation
5K VAC / 60sec

Input



Output

Reinforced Insulation

MINMAX TECHNOLOGY

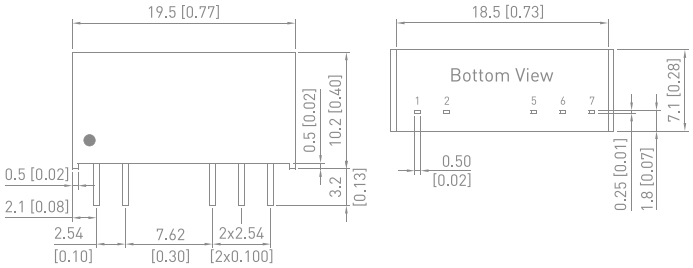
MA01-HI Series | 1W

UL 62368-1 Scheme

- Industrial Standard SIP-7 Package
- Unregulated Output Voltage
- Ultra-high I/O Isolation 5200VDC
- Wide Operating Temperature Range
- Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MA01-05S033HI	5 (4.95-5.05)	3.3	303	70%
MA01-05S05HI		5	200	70%
MA01-05S09HI		9	111	75%
MA01-05S12HI		12	84	77%
MA01-05S15HI		15	66	78%
MA01-05D05HI		±5	±100	71%
MA01-05D09HI		±9	±56	75%
MA01-05D12HI		±12	±42	77%
MA01-05D15HI		±15	±33	78%
MA01-05A1509HI		15 -9	33 -55	76%
MA01-12S033HI	12 (11.88-12.12)	3.3	303	71%
MA01-12S05HI		5	200	71%
MA01-12S09HI		9	111	76%
MA01-12S12HI		12	84	78%
MA01-12S15HI		15	66	79%
MA01-12D05HI		±5	±100	72%
MA01-12D09HI		±9	±56	76%
MA01-12D12HI		±12	±42	78%
MA01-12D15HI		±15	±33	79%
MA01-12A1509HI		15 -9	33 -55	77%
MA01-15S033HI	15 (14.85-15.15)	3.3	303	70%
MA01-15S05HI		5	200	70%
MA01-15S09HI		9	111	75%
MA01-15S12HI		12	84	75%
MA01-15S15HI		15	66	79%
MA01-15D05HI		±5	±100	71%
MA01-15D09HI		±9	±56	75%
MA01-15D12HI		±12	±42	78%
MA01-15D15HI		±15	±33	79%
MA01-15A1509HI		15 -9	33 -55	76%
MA01-24S033HI	24 (23.76-24.24)	3.3	303	70%
MA01-24S05HI		5	200	70%
MA01-24S09HI		9	111	75%
MA01-24S12HI		12	84	78%
MA01-24S15HI		15	66	80%
MA01-24D05HI		±5	±100	71%
MA01-24D09HI		±9	±56	75%
MA01-24D12HI		±12	±42	77%
MA01-24D15HI		±15	±33	78%
MA01-24A1509HI		15 -9	33 -55	75%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
5	-Vout	-Vout
6	No Pin	Common
7	+Vout	+Vout

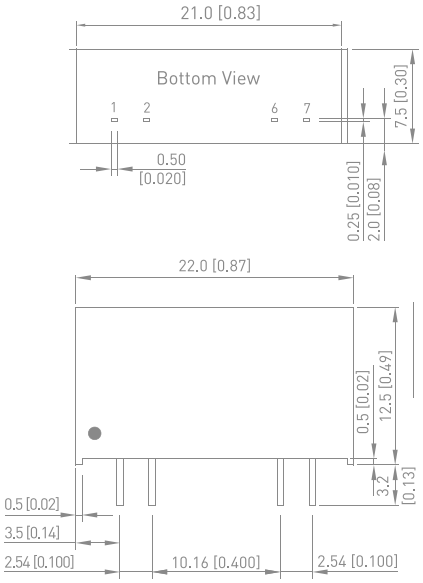
MAEU01-HI Series | 1W

UL 62368-1 Scheme

- Industrial Standard SIP-7 Package
- Ultra-high I/O Isolation 8000VDC with Reinforced Insulation, rate for 480Vrms working voltage
- Wide Operating Temperature Range
- Short Circuit Protection
- UL/cUL/IEC/EN 62368-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAEU01-05S05HI	5 (4.5 - 5.5)	5	200	79%
MAEU01-05S12HI		12	84	80%
MAEU01-05S15HI		15	68	81%
MAEU01-12S05HI	12 (10.8 - 13.2)	5	200	79%
MAEU01-12S12HI		12	84	81%
MAEU01-12S15HI		15	68	79%
MAEU01-24S05HI	24 (21.6 - 26.4)	5	200	76%
MAEU01-24S12HI		12	84	79%
MAEU01-24S15HI		15	68	79%

Mechanical Dimensions



Pin Connections

Pin	Function
1	+Vin
2	-Vin
6	-Vout
7	+Vout

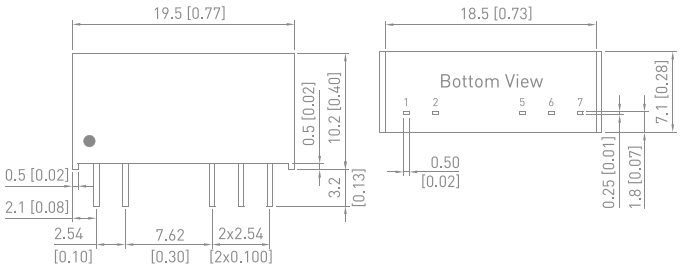
MAEU02-HI Series | 2W

UL 62368-1 Scheme

- Industrial Standard SIP-7 Package
- Unregulated Output Voltage
- Ultra-high I/O Isolation 5700VDC
- Wide Operating Temperature Range
- Short Circuit Protection
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAEU02-05S033HI	5 (4.95-5.05)	3.3	500	74%
MAEU02-05S05HI		5	400	80%
MAEU02-05S09HI		9	222	81%
MAEU02-05S12HI		12	168	82%
MAEU02-05S15HI		15	132	79%
MAEU02-05D05HI		±5	±200	78%
MAEU02-05D09HI		±9	±112	80%
MAEU02-05D12HI		±12	±84	80%
MAEU02-05D15HI		±15	±66	79%
MAEU02-05A1509HI		15 -9	66 -110	80%
MAEU02-12S033HI	12 (11.88-12.12)	3.3	500	76%
MAEU02-12S05HI		5	400	79%
MAEU02-12S09HI		9	222	81%
MAEU02-12S12HI		12	168	83%
MAEU02-12S15HI		15	132	82%
MAEU02-12D05HI		±5	±200	79%
MAEU02-12D09HI		±9	±112	81%
MAEU02-12D12HI		±12	±84	82%
MAEU02-12D15HI		±15	±66	83%
MAEU02-12A1509HI		15 -9	66 -110	81%
MAEU02-15S033HI	15 (14.85-15.15)	3.3	500	77%
MAEU02-15S05HI		5	400	79%
MAEU02-15S09HI		9	222	83%
MAEU02-15S12HI		12	168	83%
MAEU02-15S15HI		15	132	85%
MAEU02-15D05HI		±5	±200	81%
MAEU02-15D09HI		±9	±112	84%
MAEU02-15D12HI		±12	±84	82%
MAEU02-15D15HI		±15	±66	82%
MAEU02-15A1509HI		15 -9	66 -110	83%
MAEU02-24S033HI	24 (23.76-24.24)	3.3	500	76%
MAEU02-24S05HI		5	400	77%
MAEU02-24S09HI		9	222	81%
MAEU02-24S12HI		12	168	82%
MAEU02-24S15HI		15	132	82%
MAEU02-24D05HI		±5	±200	77%
MAEU02-24D09HI		±9	±112	81%
MAEU02-24D12HI		±12	±84	81%
MAEU02-24D15HI		±15	±66	80%
MAEU02-24A1509HI		15 -9	66 -110	81%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
5	-Vout	-Vout
6	No Pin	Common
7	+Vout	+Vout

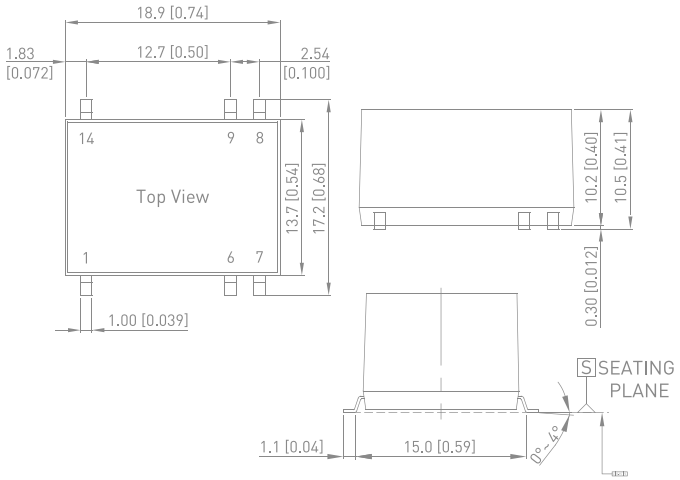
MSCEU01-HI Series | 1W

UL 62368-1

- Industrial Standard SMD Package
- Ultra-high I/O Isolation 8000VDC with Reinforced Insulation, rate for 480Vrms Working Voltage
- Wide Operating Temperature Range
- Short Circuit Protection
- UL/cUL/IEC/EN 62368-1 Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSCEU01-05S05HI	5 (4.5 - 5.5)	5	200	76%
MSCEU01-05S12HI		12	84	80%
MSCEU01-05S15HI		15	68	83%
MSCEU01-05D12HI		±12	±42	80%
MSCEU01-05D15HI		±15	±33	84%
MSCEU01-12S05HI	12 (10.8 - 13.2)	5	200	76%
MSCEU01-12S12HI		12	84	79%
MSCEU01-12S15HI		15	68	80%
MSCEU01-12D12HI		±12	±42	79%
MSCEU01-12D15HI		±15	±33	80%
MSCEU01-24S05HI	24 (21.6 - 26.4)	5	200	76%
MSCEU01-24S12HI		12	84	80%
MSCEU01-24S15HI		15	68	80%
MSCEU01-24D12HI		±12	±42	80%
MSCEU01-24D15HI		±15	±33	80%

Mechanical Dimensions



Pin Connections

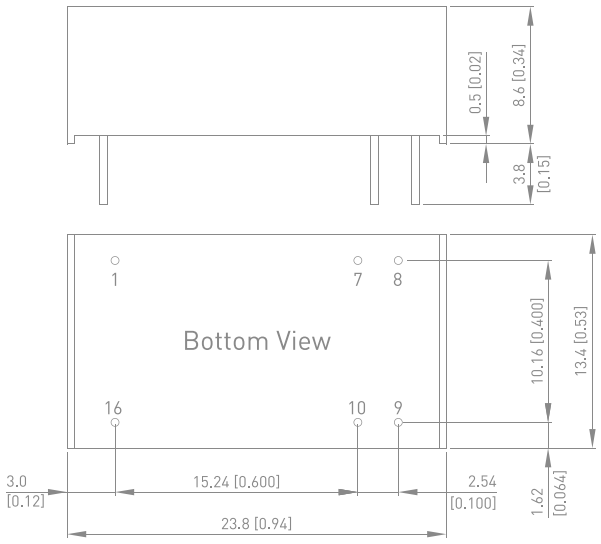
Pin	Single	Dual
1	-Vin	-Vin
6	NC	Common
7	NC	-Vout
8	+Vout	+Vout
9	-Vout	Common
14	+Vin	+Vin

MDEU02-HI Series | 2W

- Industrial Standard DIP-16 Package
- Unregulated Output Voltage
- Ultra-high I/O Isolation 8000VDC with Reinforced Insulation, rate for 300Vrms Working Voltage
- Wide Operating Temperature Range
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDEU02-05S05HI	5 (4.5 - 5.5)	5	400	65%
MDEU02-05S12HI		12	165	65%
MDEU02-05S15HI		15	133	66%
MDEU02-05D12HI		±12	±83	72%
MDEU02-05D15HI		±15	±66	73%
MDEU02-12S05HI	12 (10.8 - 13.2)	5	400	65%
MDEU02-12S12HI		12	165	65%
MDEU02-12S15HI		15	133	66%
MDEU02-12D12HI		±12	±83	74%
MDEU02-12D15HI		±15	±66	75%
MDEU02-24S05HI	24 (21.6 - 26.4)	5	400	65%
MDEU02-24S12HI		12	165	65%
MDEU02-24S15HI		15	133	66%
MDEU02-24D12HI		±12	±83	74%
MDEU02-24D15HI		±15	±66	75%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

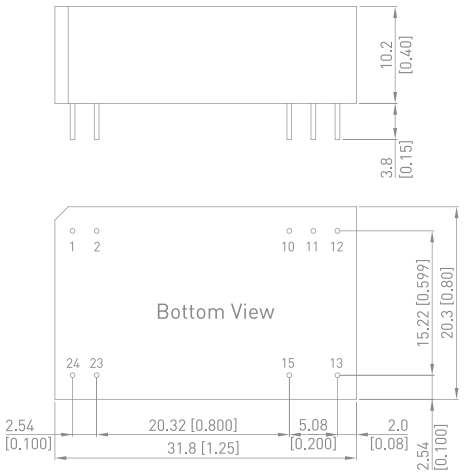
NC= No Connection

MIR500 Series | 2W

- Low Cost
- 6000VDC Isolation
- MTBF → 600,000 Hours
- Short Circuit Protection
- Input 5, 12 and 24VDC
- Output 5, 12, 15, ±5, ±12 and ±15VDC
- Regulated Outputs
- Low Isolation Capacitance
- Low Leakage Current
- 3 Years Product Warranty

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIR501	5 (4.5 ~ 5.5)	5	400	62%
MIR502		12	165	63%
MIR503		15	133	64%
MIR504		±5	±100	42%
MIR505		±12	±83	57%
MIR506		±15	±66	57%
MIR511	12 (10.8 ~ 13.2)	5	400	62%
MIR512		12	165	63%
MIR513		15	133	64%
MIR514		±5	±100	45%
MIR515		±12	±83	59%
MIR516		±15	±66	59%
MIR521	24 (21.6 ~ 26.4)	5	400	62%
MIR522		12	165	63%
MIR523		15	133	64%
MIR524		±5	±100	45%
MIR525		±12	±83	58%
MIR526		±15	±66	58%

Mechanical Dimensions



Pin Connections

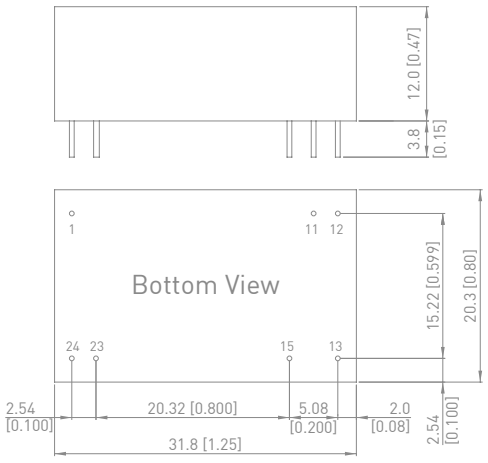
Pin	Single	Dual
1	+Vin	+Vin
2	+Vin	+Vin
10	No Pin	Common
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

MIE03-HI Series | 3W

- Industrial Standard DIP-24 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- Ultra-high I/O Isolation 9000VDC with Reinforced Insulation, rate for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-Voltage, Overload/Voltage and Short Circuit Protection
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIE03-05S05HI	5 (4.5 - 9)	5	700	82%
MIE03-05S058HI		5.8	600	82%
MIE03-05S12HI		12	290	83%
MIE03-05S15HI		15	235	84%
MIE03-05S24HI		24	146	83%
MIE03-05D12HI		±12	±145	84%
MIE03-05D15HI		±15	±115	84%
MIE03-12S05HI	12 (9 - 18)	5	700	82%
MIE03-12S12HI		12	290	86%
MIE03-12S15HI		15	235	87%
MIE03-12S24HI		24	146	86%
MIE03-12D12HI		±12	±145	87%
MIE03-12D15HI		±15	±115	87%
MIE03-24S05HI	24 (18 - 36)	5	700	82%
MIE03-24S12HI		12	290	85%
MIE03-24S15HI		15	235	87%
MIE03-24S24HI		24	146	86%
MIE03-24D12HI		±12	±145	87%
MIE03-24D15HI		±15	±115	86%
MIE03-48S05HI	48 (36 - 75)	5	700	82%
MIE03-48S12HI		12	290	85%
MIE03-48S15HI		15	235	85%
MIE03-48S24HI		24	146	83%
MIE03-48D12HI		±12	±145	84%
MIE03-48D15HI		±15	±115	84%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

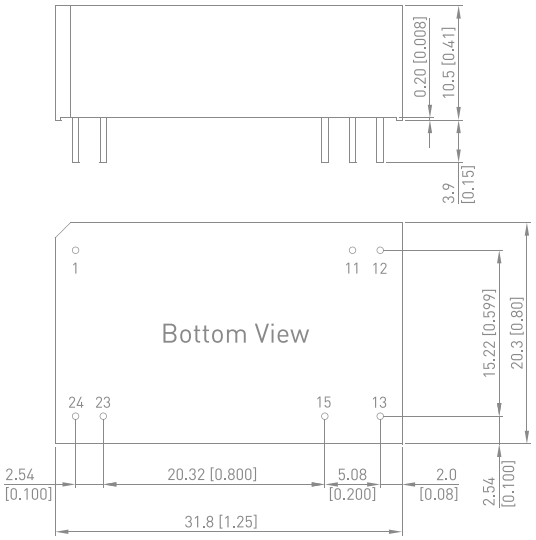
MEI03-HI Series | 3W

UL 62368-1 Scheme RoHS Compliant

- Industrial Standard DIP-24 Package
- Ultra-wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- Ultra-high Isolation 8000VDC with Reinforced Insulation, rate for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- Overload and Short Circuit Protection
- Designed-in Conducted EMI meets EN 55032 Class A
- UL/cUL/IEC/EN 60950-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MEI03-24S05HI	24 (9 ~ 40)	5	600	77%
MEI03-24S12HI		12	250	82%
MEI03-24D12HI		±12	±125	83%
MEI03-24D15HI		±15	±100	83%
MEI03-48S05HI	48 (18 ~ 80)	5	600	77%
MEI03-48S12HI		12	250	82%
MEI03-48D12HI		±12	±125	83%
MEI03-48D15HI		±15	±100	83%

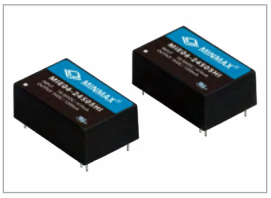
Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

MIE06-HI Series | 6W

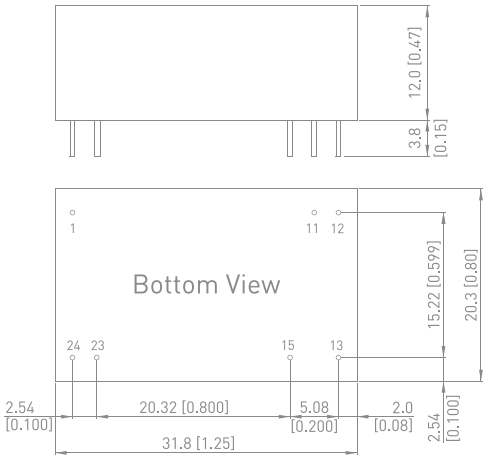


UL 62368-1

- Industrial Standard DIP-24 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- Ultra-high I/O Isolation 9000VDC with Reinforced Insulation, rate for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-Voltage, Overload/Voltage and Short Circuit Protection
- Conducted EMI EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIE06-12S05HI	12 (9 - 18)	5	1,200	83%
MIE06-12S12HI		12	500	86%
MIE06-12S15HI		15	400	86%
MIE06-12S24HI		24	250	86%
MIE06-12D12HI		±12	±250	87%
MIE06-12D15HI		±15	±200	87%
MIE06-24S05HI	24 (18 - 36)	5	1,200	83%
MIE06-24S12HI		12	500	86%
MIE06-24S15HI		15	400	87%
MIE06-24S24HI		24	250	85%
MIE06-24D12HI		±12	±250	86%
MIE06-24D15HI		±15	±200	87%
MIE06-48S05HI	48 (36 - 75)	5	1,200	83%
MIE06-48S12HI		12	500	86%
MIE06-48S15HI		15	400	89%
MIE06-48S24HI		24	250	86%
MIE06-48D12HI		±12	±250	87%
MIE06-48D15HI		±15	±200	88%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

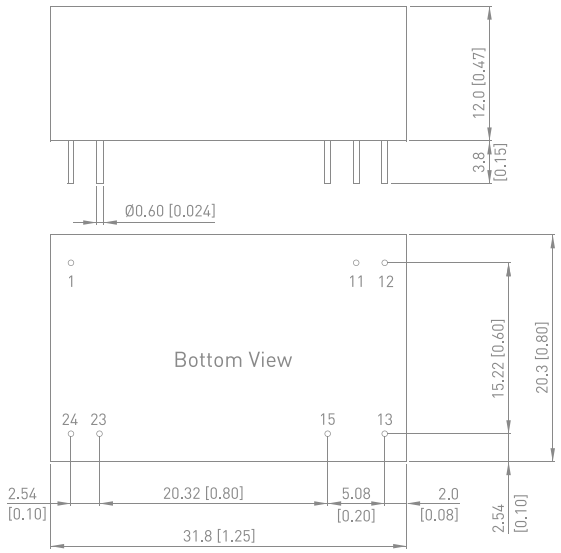
MIE10-HI Series | 10W

UL 62368-1 Scheme

- Industrial Standard DIP-24 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- Ultra-high I/O Isolation 9000VDC with reinforced Insulation, rate for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55032 Class A Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIE10-12S033HI	12 (9 - 18)	3.3	2,700	81%
MIE10-12S05HI		5	2,000	83%
MIE10-12S051HI		5.1	2,000	83%
MIE10-12S12HI		12	833	86%
MIE10-12S15HI		15	666	88%
MIE10-12S24HI		24	416	88%
MIE10-12D12HI		±12	±416	88%
MIE10-12D15HI		±15	±333	87%
MIE10-24S033HI	24 (18 - 36)	3.3	2,700	81%
MIE10-24S05HI		5	2,000	84%
MIE10-24S051HI		5.1	2,000	84%
MIE10-24S12HI		12	833	87%
MIE10-24S15HI		15	666	88%
MIE10-24S24HI		24	416	88%
MIE10-24D12HI		±12	±416	88%
MIE10-24D15HI		±15	±333	87%
MIE10-48S033HI	48 (36 - 75)	3.3	2,700	81%
MIE10-48S05HI		5	2,000	84%
MIE10-48S051HI		5.1	2,000	84%
MIE10-48S12HI		12	833	87%
MIE10-48S15HI		15	666	88%
MIE10-48S24HI		24	416	87%
MIE10-48D12HI		±12	±416	87%
MIE10-48D15HI		±15	±333	87%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

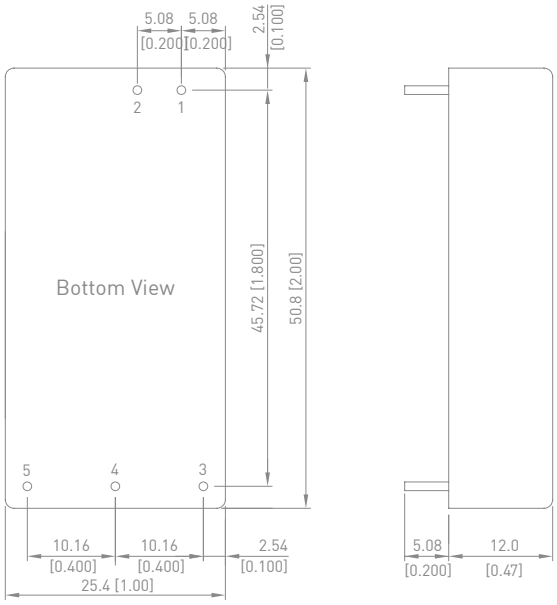
MKE15-HI Series | 15W

UL 62368-1

- Industrial Standard 2"x1" Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- Ultra-high I/O Isolation 8000VDC with Reinforced Insulation, rated for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- EMI Emission EN55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKE15-12S05HI	12 (9 - 18)	5	3,000	85%
MKE15-12S051HI		5.1	3,000	85%
MKE15-12S12HI		12	1,250	88%
MKE15-12S15HI		15	1,000	88%
MKE15-12S24HI		24	625	88%
MKE15-12D12HI		±12	±625	88%
MKE15-12D15HI		±15	±500	89%
MKE15-24S05HI	24 (18 - 36)	5	3,000	87%
MKE15-24S051HI		5.1	3,000	87%
MKE15-24S12HI		12	1,250	88%
MKE15-24S15HI		15	1,000	89%
MKE15-24S24HI		24	625	90%
MKE15-24D12HI		±12	±625	90%
MKE15-24D15HI		±15	±500	89%
MKE15-48S05HI	48 (36 - 75)	5	3,000	87%
MKE15-48S051HI		5.1	3,000	87%
MKE15-48S12HI		12	1,250	87%
MKE15-48S15HI		15	1,000	90%
MKE15-48S24HI		24	625	89%
MKE15-48D12HI		±12	±625	89%
MKE15-48D15HI		±15	±500	88%

Mechanical Dimensions



Pin Connections

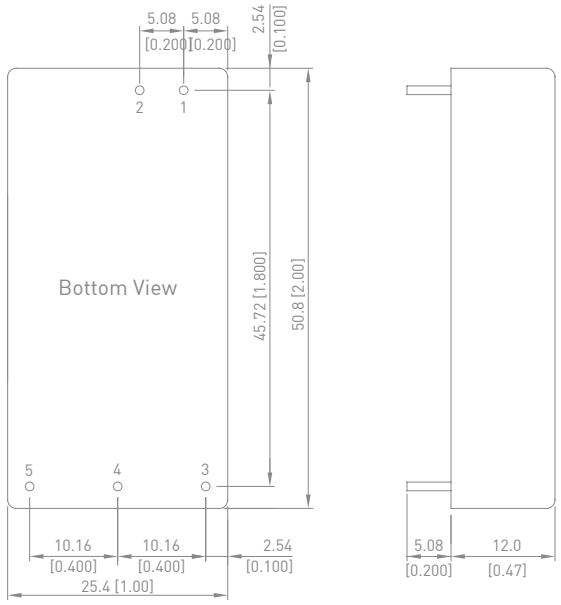
Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout

MKE20-HI Series | 20W

- Industrial Standard 2"x1" Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- Ultra-high I/O Isolation 8000VDC with Reinforced Insulation, rated for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- EMI Emission EN55032 Class A Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKE20-12S05HI	12 (9 - 18)	5	4,000	85%
MKE20-12S051HI		5.1	4,000	85%
MKE20-12S12HI		12	1,670	88%
MKE20-12S15HI		15	1,333	88%
MKE20-12S24HI		24	840	89%
MKE20-12D12HI		±12	±840	89%
MKE20-12D15HI		±15	±670	89%
MKE20-24S05HI	24 (18 - 36)	5	4,000	87%
MKE20-24S051HI		5.1	4,000	87%
MKE20-24S12HI		12	1,670	88%
MKE20-24S15HI		15	1,333	89%
MKE20-24S24HI		24	840	90%
MKE20-24D12HI		±12	±840	90%
MKE20-24D15HI		±15	±670	90%
MKE20-48S05HI	48 (36 - 75)	5	4,000	87%
MKE20-48S051HI		5.1	4,000	87%
MKE20-48S12HI		12	1,670	88%
MKE20-48S15HI		15	1,333	90%
MKE20-48S24HI		24	840	89%
MKE20-48D12HI		±12	±840	89%
MKE20-48D15HI		±15	±670	90%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout

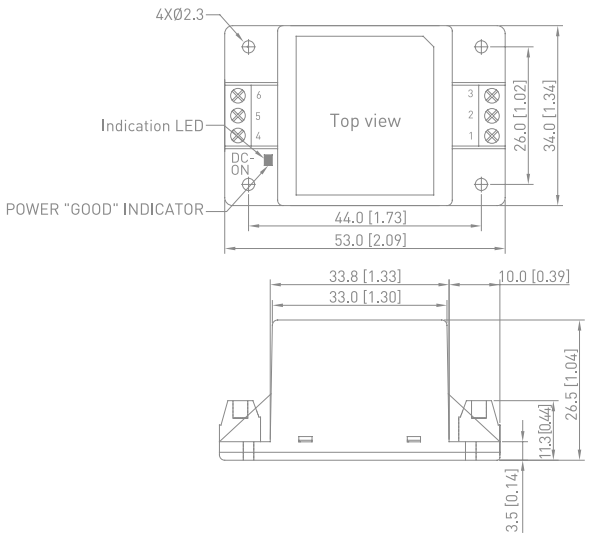
MJA06C Series | 6W

UL 62368-1

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- 80-160VDC Wide Input Voltage Range
- Fully Regulated Output Voltage
- High Efficiency up to 84%
- I/O Isolation 3000VAC with Reinforced Insulation, rated for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Very Low No Load Power Consumption
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- EMI Emission EN 55032 Class A Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MJA06-110S05C	110 (80 - 160)	5	1,200	79%
MJA06-110S051C		5.1	1,200	79%
MJA06-110S12C		12	500	83%
MJA06-110S15C		15	400	83%
MJA06-110S24C		24	250	84%
MJA06-110S48C		48	125	82%
MJA06-110D12C		±12	±250	84%
MJA06-110D15C		±15	±200	84%
MJA06-110D24C		±24	±125	83%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2	-Vin	-Vin
3	+Vin	+Vin
4	-Vout	-Vout
5	NC	Common
6	+Vout	+Vout

NC= No Connection

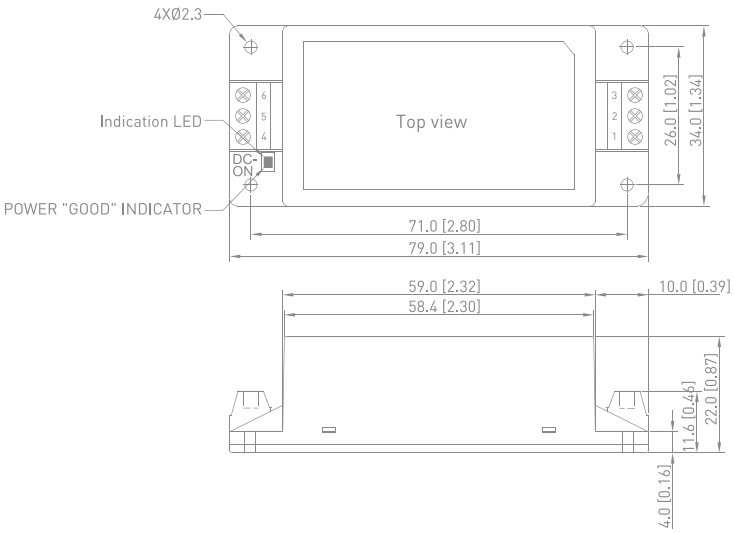
MKA10C Series | 10W

UL 62368-1

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- 80-160VDC Wide Input Voltage Range
- Fully Regulated Output Voltage
- High Efficiency up to 85%
- I/O Isolation 3000VAC with Reinforced Insulation, rated for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Very Low No Load Power Consumption
- Under-voltage, Overload and Short Circuit Protection
- Remote On/Off Control
- EMI Emission EN 55032 Class A Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKA10-110S05C	110 (80 - 160)	5	2,000	83%
MKA10-110S051C		5.1	2,000	83%
MKA10-110S12C		12	833	85%
MKA10-110S15C		15	666	85%
MKA10-110S24C		24	416	85%
MKA10-110S48C		48	208	83%
MKA10-110D12C		±12	±416	85%
MKA10-110D15C		±15	±333	85%
MKA10-110D24C		±24	±208	84%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2	-Vin	-Vin
3	+Vin	+Vin
4	-Vout	-Vout
5	NC	Common
6	+Vout	+Vout

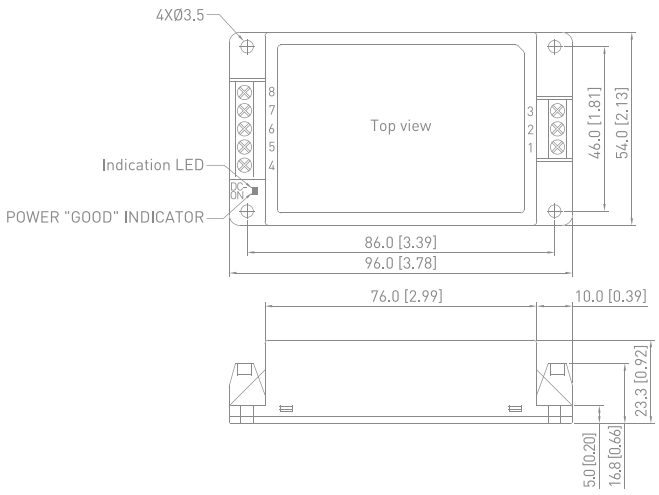
NC= No Connection

MOA20C Series | 20W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MOA20-110S05C	110 (80 - 160)	5	4,000	87%
MOA20-110S051C		5.1	4,000	87%
MOA20-110S12C		12	1,670	88%
MOA20-110S15C		15	1,340	88%
MOA20-110S24C		24	830	88%
MOA20-110S48C		48	420	86%
MOA20-110D12C		±12	±830	87%
MOA20-110D15C		±15	±670	87%
MOA20-110D24C		±24	±420	87%

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- 80-160VDC Wide Input Voltage Range
- Fully Regulated Output Voltage
- High Efficiency up to 88%
- I/O Isolation 3000VAC with Reinforced Insulation, rated for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Very Low No Load Power Consumption
- Under-voltage, Overload/Voltage and Short Circuit Protection
- Remote On/Off Control
- EMI Emission EN 55032 Class A Approved
- EMC Immunity EN 61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2	-Vin	-Vin
3	+Vin	+Vin
4	NC	NC
5	-Vout	-Vout
6	NC	Common
7	+Vout	+Vout
8	NC	NC

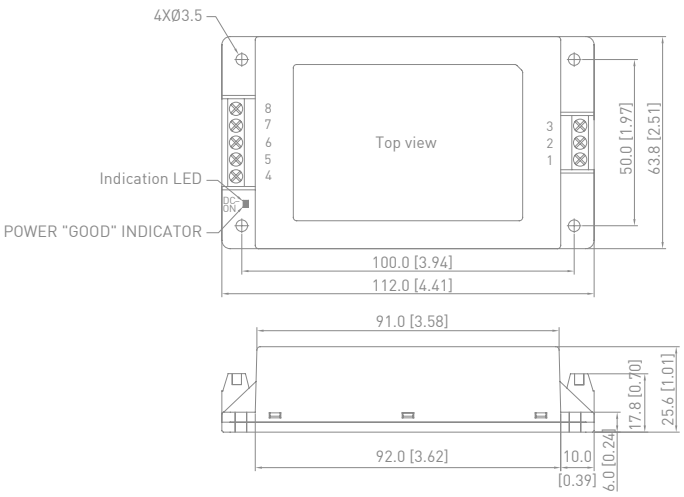
NC= No Connection

MQA40C Series | 40W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MQA40-110S05C	110 (80 - 160)	5	8,000	87%
MQA40-110S051C		5.1	8,000	87%
MQA40-110S12C		12	3,330	89%
MQA40-110S15C		15	2,670	89%
MQA40-110S24C		24	1,670	89%
MQA40-110S48C		48	840	87%
MQA40-110D12C		±12	±1670	89%
MQA40-110D15C		±15	±1330	89%
MQA40-110D24C		±24	±830	87%

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- 80-160VDC Wide Input Voltage Range
- Fully Regulated Output Voltage
- High Efficiency up to 89%
- I/O Isolation 3000VAC with Reinforced Insulation, rated for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Very Low No Load Power Consumption
- Under-voltage, Overload/Voltage and Short Circuit Protection
- Remote On/Off Control
- EMI Emission EN 55032 Class A Approved
- EMC Immunity EN61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2	-Vin	-Vin
3	+Vin	+Vin
4	+Vout	+Vout
5	NC	NC
6	-Vout	Common
7	NC	NC
8	NC	-Vout

NC= No Connection

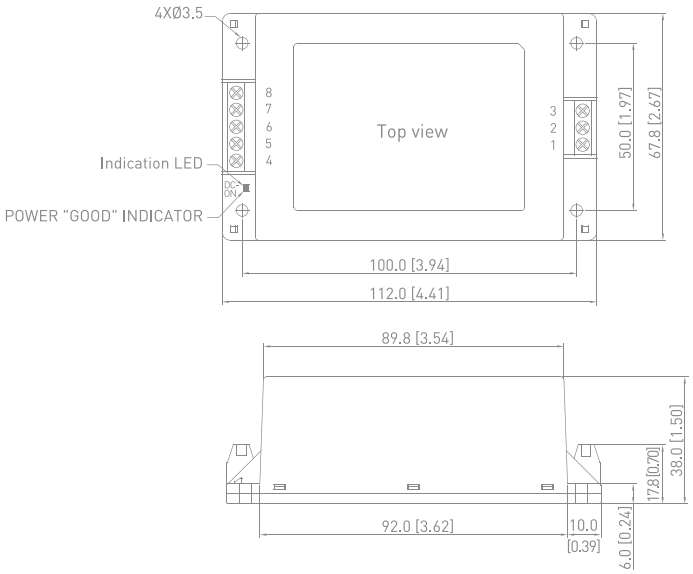
MRA60C Series | 60W

UL 62368-1

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MRA60-110S05C	110 (80 - 160)	5	12,000	88%
MRA60-110S051C		5.1	12,000	88%
MRA60-110S12C		12	5,000	89%
MRA60-110S15C		15	4,000	89%
MRA60-110S24C		24	2,500	88%
MRA60-110S48C		48	1,250	88%
MRA60-110D12C		±12	±2500	88%
MRA60-110D15C		±15	±2000	88%
MRA60-110D24C		±24	±1250	88%

- Fully Encapsulated Plastic Case for Chassis and DIN-Rail Mounting Version
- 80-160VDC Wide Input Voltage Range
- Fully Regulated Output Voltage
- High Efficiency up to 89%
- I/O Isolation 3000VAC with Reinforced Insulation, rated for 1000Vrms Working Voltage
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- Remote On/Off Control
- EMI Emission EN 55032 Class A Approved
- EMC Immunity EN61000-4-2,3,4,5,6,8 Approved
- UL/cUL/IEC/EN 62368-1 Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	Remote On/Off	Remote On/Off
2	-Vin	-Vin
3	+Vin	+Vin
4	NC	+Vout
5	+Vout	NC
6	NC	Common
7	-Vout	NC
8	NC	-Vout

NC= No Connection

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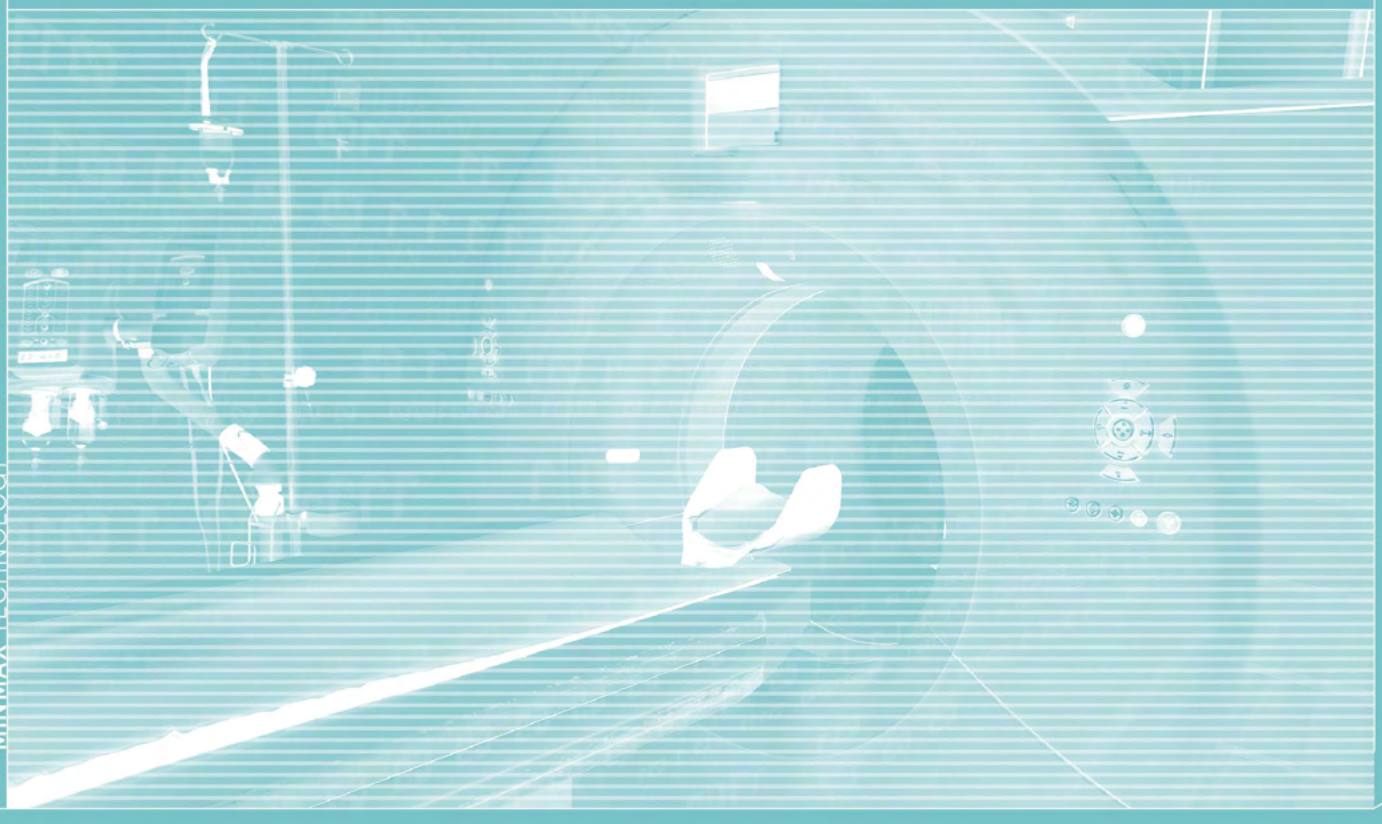
MEDICAL SAFETY POWER SOLUTIONS

IEC 60601-1

IEC 60601-1 APPROVED

2 X MOPP



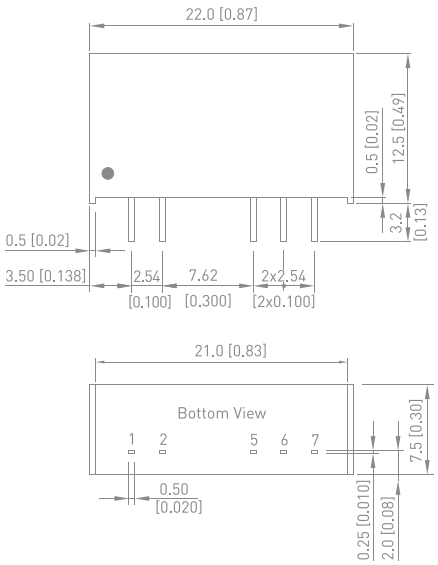
MINMAX TECHNOLOGY

MAU400 Series | 1W

- Industrial Standard SIP-7 Package
- Unregulated Output Voltage
- I/O Isolation 3000VAC with Reinforced Insulation, rated for 300Vrms Working Voltage
- Wide Operating Temperature Range
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 1xMOPP & 2xMOOP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAU401	5 (4.5 - 5.5)	5	200	66%
MAU402		12	80	66%
MAU403		15	65	66%
MAU404		±5	±100	66%
MAU405		±12	±40	72%
MAU406		±15	±35	73%
MAU411	12 (10.8 - 13.2)	5	200	66%
MAU412		12	80	66%
MAU413		15	65	66%
MAU414		±5	±100	66%
MAU415		±12	±40	74%
MAU416		±15	±35	75%

Mechanical Dimensions



Pin Connections

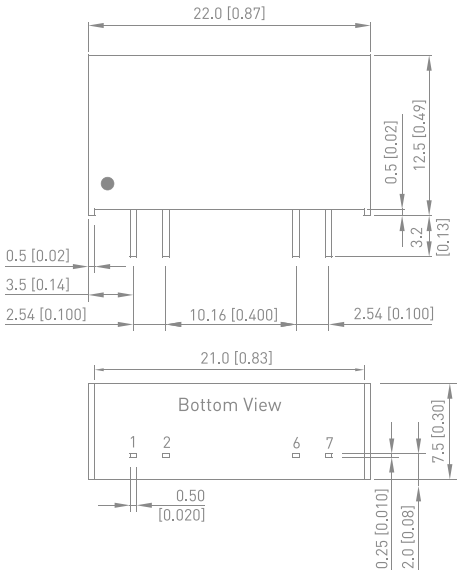
Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
5	-Vout	-Vout
6	No Pin	Common
7	+Vout	+Vout

MAU01M Series | 1W

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MAU01-05S05M	5 (4.5 - 5.5)	5	200	79%
MAU01-05S12M		12	84	80%
MAU01-05S15M		15	68	81%
MAU01-12S05M	12 (10.8 - 13.2)	5	200	79%
MAU01-12S12M		12	84	81%
MAU01-12S15M		15	68	79%
MAU01-24S05M	24 (21.6 - 26.4)	5	200	76%
MAU01-24S12M		12	84	79%
MAU01-24S15M		15	68	79%

- Industrial Standard SIP-7 Package
- Unregulated Output Voltage
- I/O Isolation 4000VAC with Reinforced Insulation, rated for 300Vrms Working Voltage
- Low I/O Leakage Current < 2μA
- Wide Operating Temperature Range
- Short Circuit Protection
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved with CE Marking

Mechanical Dimensions



Pin Connections

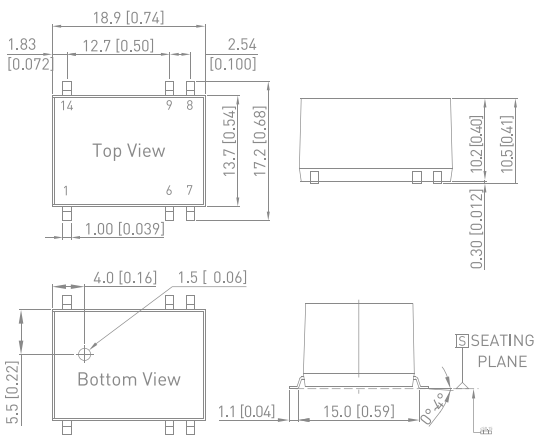
Pin	Dual
1	+Vin
2	-Vin
6	-Vout
7	+Vout

MSCU01M Series | 1W

- Industrial Standard SMD Package
- Unregulated Output Voltage
- I/O Isolation 4000VAC with Reinforced Insulation, rated for 250Vrms Working Voltage
- Low I/O Leakage Current < 2μA
- Wide Operating Temperature Range
- Cleaning-washable Process Available (option)
- Qualified for Lead-free Reflow Solder Process According to IPC/JEDEC J-STD-020D.1
- Tape & Reel Package Available Short Circuit Protection
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved with CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSCU01-05S05M	5 (4.5 - 5.5)	5	200	76%
MSCU01-05S12M		12	84	80%
MSCU01-05S15M		15	68	83%
MSCU01-05D12M		±12	±42	80%
MSCU01-05D15M		±15	±33	84%
MSCU01-12S05M	12 (10.8 - 13.2)	5	200	76%
MSCU01-12S12M		12	84	79%
MSCU01-12S15M		15	68	80%
MSCU01-12D12M		±12	±42	79%
MSCU01-12D15M		±15	±33	80%
MSCU01-24S05M	24 (21.6 - 26.4)	5	200	76%
MSCU01-24S12M		12	84	80%
MSCU01-24S15M		15	68	80%
MSCU01-24D12M		±12	±42	80%
MSCU01-24D15M		±15	±33	80%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
6	NC	Common
7	NC	-Vout
8	+Vout	+Vout
9	-Vout	Common
14	+Vin	+Vin

NC: No Connection

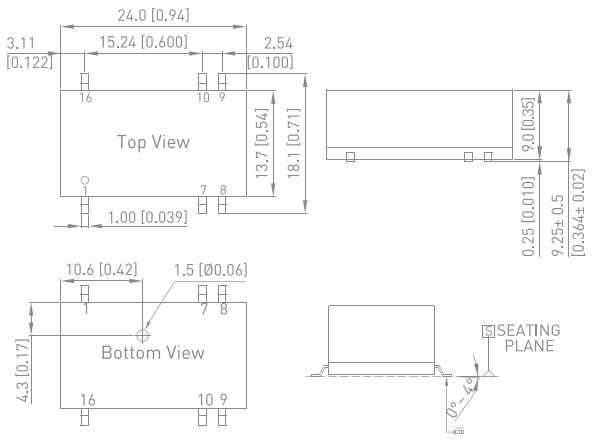
MSHU100 Series | 2W

ANSI/AAMI ES60601-1 · IEC 60601-1 · UL 62368-1 · CB Scheme · RoHS Compliant · 5 YEAR WARRANTY

- Industrial Standard SMD Package
- Unregulated Output Voltage
- I/O Isolation 4000VAC with Reinforced Insulation, rated for 300Vrms Working Voltage
- Low I/O Leakage Current < 2μA
- Wide Operating Temperature Range
- Cleaning-washable Process Available(option)
- Qualified for Lead-free Reflow Solder Process According to IPC/JEDEC J-STD-020D.1
- Tape & Reel Package Available
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 1xMOPP & 2xMOOP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MSHU102	5 (4.5 - 5.5)	5	400	66%
MSHU104		12	165	66%
MSHU105		15	133	66%
MSHU108		±12	±83	72%
MSHU109		±15	±66	73%
MSHU112	12 (10.8 - 13.2)	5	400	66%
MSHU114		12	165	66%
MSHU115		15	133	66%
MSHU118		±12	±83	74%
MSHU119		±15	±66	75%
MSHU122	24 (21.6 - 26.4)	5	400	66%
MSHU124		12	165	66%
MSHU125		15	133	66%
MSHU128		±12	±83	74%
MSHU129		±15	±66	75%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

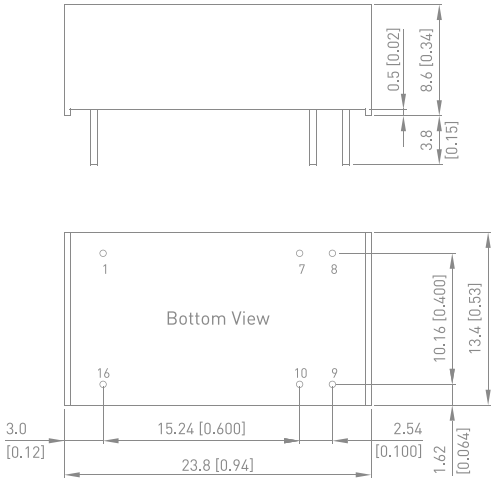
NC: No Connection

MDHU100 Series | 2W

- Industry Standard DIP-16 Package
- Unregulated Output Voltage
- I/O Isolation 4000VAC with Reinforced Insulation, rated or 300Vrms Working Voltage
- Low I/O Leakage Current < 2μA
- Wide Operating Temperature Range
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 1xMOPP & 2xMOOP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MDHU102	5 (4.5 - 5.5)	5	400	66%
MDHU104		12	165	66%
MDHU105		15	133	66%
MDHU108		±12	±83	72%
MDHU109		±15	±66	73%
MDHU112	12 (10.8 - 13.2)	5	400	66%
MDHU114		12	165	66%
MDHU115		15	133	66%
MDHU118		±12	±83	74%
MDHU119		±15	±66	75%
MDHU122	24 (21.6 - 26.4)	5	400	66%
MDHU124		12	165	66%
MDHU125		15	133	66%
MDHU128		±12	±83	74%
MDHU129		±15	±66	75%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	-Vin	-Vin
7	NC	NC
8	NC	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

NC: No Connection

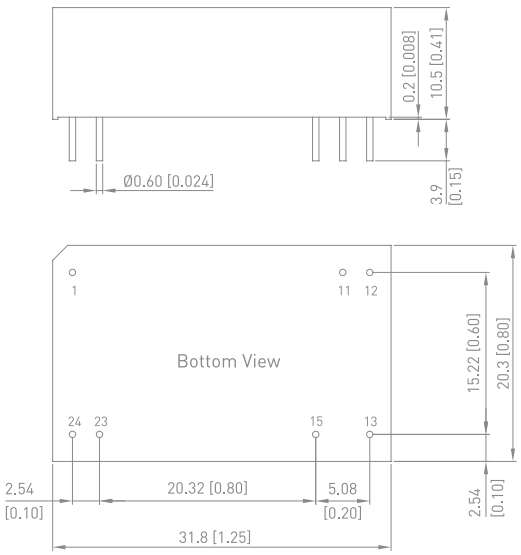
MIHW2000 Series | 3W

ANSI/AAMI ES60601-1 | IEC 60601-1 | UL 62368-1 | CB Scheme | RoHS Compliant | 5 YEAR WARRANTY

- Industrial Standard DIP-24 Package
- Ultra-Wide 4:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 4000VAC with Reinforced Insulation, rated for 1000Vrms Working Voltage
- Low I/O Leakage Current < 2μA
- Wide Operating Temperature Range
- Under-Voltage, Overload and Short Circuit Protection
- Conducted EMI EN 55011/22 Class A Approved
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 1xMOPP & 2xMOOP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved
- UL/cUL/IEC/EN 60950-1 Safety Approval & CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIHW2022	24 (9 - 40)	5	600	78%
MIHW2023		12	250	83%
MIHW2026		±12	±125	83%
MIHW2027		±15	±100	83%
MIHW2032	48 (18 - 80)	5	600	78%
MIHW2033		12	250	83%
MIHW2036		±12	±125	83%
MIHW2037		±15	±100	83%
MIHW2042	110 (36 - 160)	5	600	78%
MIHW2043		12	250	83%
MIHW2046		±12	±125	83%
MIHW2047		±15	±100	83%

Mechanical Dimensions



Pin Connections

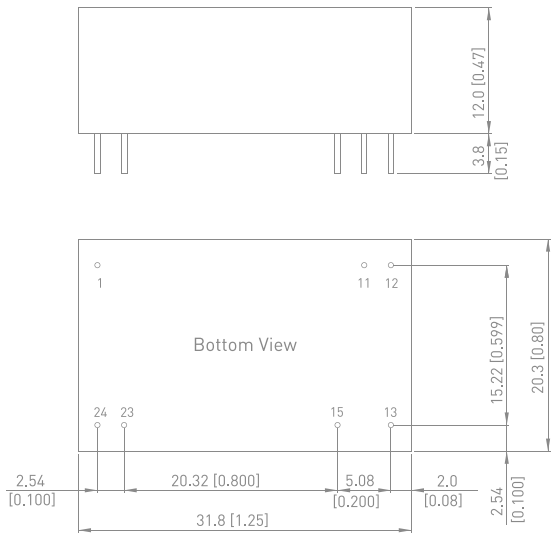
Pin	Single	Dual
1	+Vin	+Vin
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

MIW03M Series | 3.5W

- Industrial Standard DIP-24 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 5000VAC with Reinforced Insulation, rated for 250Vrms Working Voltage
- Creepage & Clearance Distance meet 8mm
- Low I/O Leakage Current < 2μA
- Wide Operating Temperature Range
- No Min. Load Requiremnt
- Under-Voltage, Overload/Voltage and Short Circuit Protection
- Conducted EMI EN 55011 Class A Approved
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved with CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIW03-05S05M	5 (4.5 - 9)	5	700	83%
MIW03-05S058M		5.8	600	83%
MIW03-05S12M		12	290	84%
MIW03-05S15M		15	235	84%
MIW03-05D12M		±12	±145	84%
MIW03-05D15M		±15	±115	84%
MIW03-12S05M	12 (9 - 18)	5	700	83%
MIW03-12S12M		12	290	87%
MIW03-12S15M		15	235	87%
MIW03-12D12M		±12	±145	87%
MIW03-12D15M		±15	±115	87%
MIW03-24S05M	24 (18 - 36)	5	700	83%
MIW03-24S12M		12	290	86%
MIW03-24S15M		15	235	87%
MIW03-24D12M		±12	±145	87%
MIW03-24D15M		±15	±115	86%
MIW03-48S05M	48 (36 - 75)	5	700	83%
MIW03-48S12M		12	290	86%
MIW03-48S15M		15	235	85%
MIW03-48D12M		±12	±145	84%
MIW03-48D15M		±15	±115	84%

Mechanical Dimensions



Pin Connections

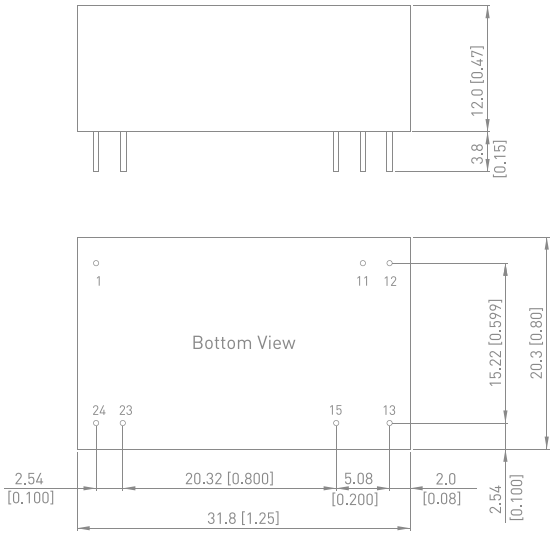
Pin	Single	Dual
1	+Vin	+Vin
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

MIW06M Series | 6W

- Industrial Standard DIP-24 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 5000VAC with Reinforced Insulation, rated for 250Vrms Working Voltage
- Creepage & Clearance Distance meet 8mm
- Low I/O Leakage Current < 2μA
- Wide Operating Temperature Range
- No Min. Load Requiremnt
- Under-Voltage, Overload/Voltage and Short Circuit Protection
- Conducted EMI EN 55011 Class A Approved
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved with CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIW06-12S05M	12 (9 - 18)	5	1200	84%
MIW06-12S12M		12	500	87%
MIW06-12S15M		15	400	86%
MIW06-12D12M		±12	±250	87%
MIW06-12D15M		±15	±200	87%
MIW06-24S05M	24 (18 - 36)	5	1200	84%
MIW06-24S12M		12	500	87%
MIW06-24S15M		15	400	87%
MIW06-24D12M		±12	±250	86%
MIW06-24D15M		±15	±200	87%
MIW06-48S05M	48 (36 - 75)	5	1200	84%
MIW06-48S12M		12	500	87%
MIW06-48S15M		15	400	89%
MIW06-48D12M		±12	±250	87%
MIW06-48D15M		±15	±200	88%

Mechanical Dimensions



Pin Connections

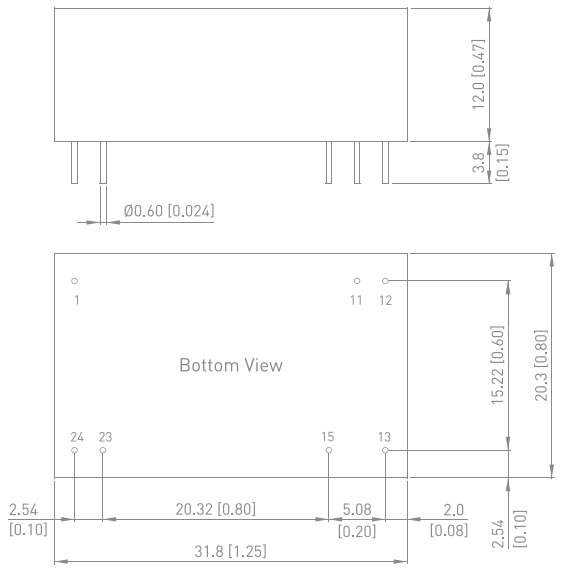
Pin	Single	Dual
1	+Vin	+Vin
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

MIW10M Series | 10W

- Industrial Standard DIP-24 Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 5000VAC with Reinforced Insulation, rated for 250Vrms Working Voltage
- Creepage & Clearance Distance meet 8mm
- Low I/O Leakage Current < 2μA
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-Voltage, Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55011 Class A Approved
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved with CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MIW10-12S033M	12 (9 - 18)	3.3	2700	81%
MIW10-12S05M		5	2000	84%
MIW10-12S051M		5.1	2000	84%
MIW10-12S12M		12	833	87%
MIW10-12S15M		15	666	88%
MIW10-12S24M		24	416	88%
MIW10-12D12M		±12	±416	88%
MIW10-12D15M		±15	±333	87%
MIW10-24S033M	24 (18 - 36)	3.3	2700	81%
MIW10-24S05M		5	2000	85%
MIW10-24S051M		5.1	2000	85%
MIW10-24S12M		12	833	88%
MIW10-24S15M		15	666	88%
MIW10-24S24M		24	416	88%
MIW10-24D12M		±12	±416	88%
MIW10-24D15M		±15	±333	87%
MIW10-48S033M	48 (36 - 75)	3.3	2700	81%
MIW10-48S05M		5	2000	85%
MIW10-48S051M		5.1	2000	85%
MIW10-48S12M		12	833	88%
MIW10-48S15M		15	666	88%
MIW10-48S24M		24	416	87%
MIW10-48D12M		±12	±416	87%
MIW10-48D15M		±15	±333	87%

Mechanical Dimensions



Pin Connections

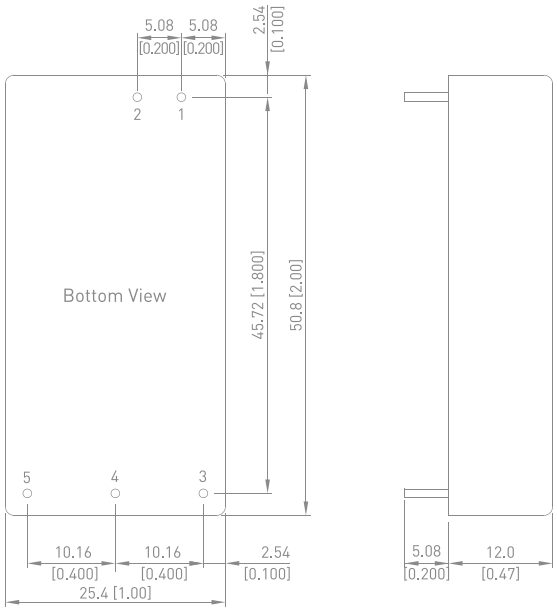
Pin	Single	Dual
1	+Vin	+Vin
11	No Pin	Common
12	-Vout	No Pin
13	+Vout	-Vout
15	No Pin	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

MKW15M Series | 15W

- Industrial Standard 2" X 1" Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 4200VAC with Reinforced Insulation, rated for 300Vrms Working Voltage
- Low I/O Leakage Current < 5μA
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55011 Class A Approved
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved with CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKW15-12S05M	12 (9 - 18)	5	3000	86%
MKW15-12S051M		5.1	3000	86%
MKW15-12S12M		12	1250	89%
MKW15-12S15M		15	1000	88%
MKW15-12S24M		24	625	88%
MKW15-12D12M		±12	±625	88%
MKW15-12D15M		±15	±500	89%
MKW15-24S05M	24 (18 - 36)	5	3000	88%
MKW15-24S051M		5.1	3000	88%
MKW15-24S12M		12	1250	89%
MKW15-24S15M		15	1000	89%
MKW15-24S24M		24	625	90%
MKW15-24D12M		±12	±625	90%
MKW15-24D15M		±15	±500	89%
MKW15-48S05M	48 (36 - 75)	5	3000	88%
MKW15-48S051M		5.1	3000	88%
MKW15-48S12M		12	1250	88%
MKW15-48S15M		15	1000	90%
MKW15-48S24M		24	625	89%
MKW15-48D12M		±12	±625	89%
MKW15-48D15M		±15	±500	88%

Mechanical Dimensions



Pin Connections

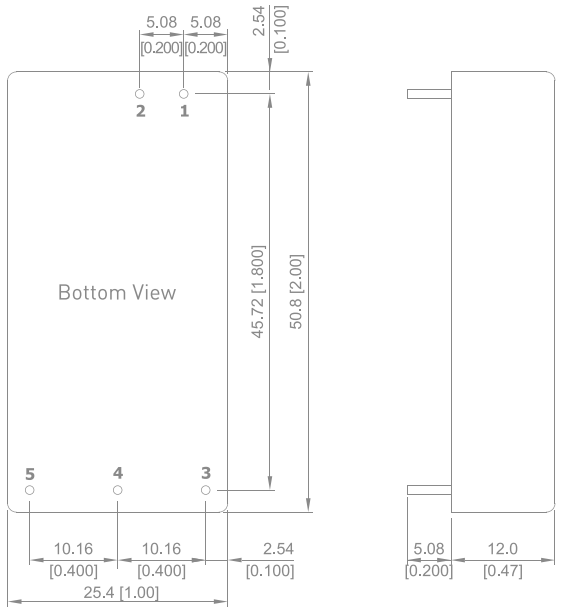
Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout

MKW20M Series | 20W

- Industrial Standard 2" X 1" Package
- Wide 2:1 Input Voltage Range
- Fully Regulated Output Voltage
- I/O Isolation 4200VAC with Reinforced Insulation, rated for 300Vrms Working Voltage
- Low I/O Leakage Current < 5µA
- Wide Operating Temperature Range
- No Min. Load Requirement
- Under-voltage, Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55011 Class A Approved
- Medical EMC Standard with 4th Edition of EMI EN 55011 and EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved with CE Marking

Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency
MKW20-12S05M	12 (9 - 18)	5	4000	86%
MKW20-12S051M		5.1	4000	86%
MKW20-12S12M		12	1670	89%
MKW20-12S15M		15	1333	88%
MKW20-12S24M		24	840	89%
MKW20-12D12M		±12	±840	89%
MKW20-12D15M		±15	±670	89%
MKW20-24S05M	24 (18 - 36)	5	4000	88%
MKW20-24S051M		5.1	4000	88%
MKW20-24S12M		12	1670	89%
MKW20-24S15M		15	1333	89%
MKW20-24S24M		24	840	90%
MKW20-24D12M		±12	±840	90%
MKW20-24D15M		±15	±670	90%
MKW20-48S05M	48 (36 - 75)	5	4000	88%
MKW20-48S051M		5.1	4000	88%
MKW20-48S12M		12	1670	89%
MKW20-48S15M		15	1333	90%
MKW20-48S24M		24	840	89%
MKW20-48D12M		±12	±840	89%
MKW20-48D15M		±15	±670	90%

Mechanical Dimensions



Pin Connections

Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout

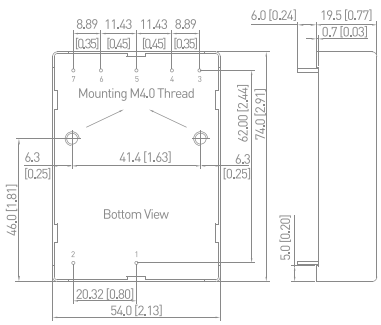
AJM-24 Series | 24W

Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
AJM-24S05	85-264VAC 120-370VDC	5	3,000	77%
AJM-24S09		9	2,666	82%
AJM-24S12		12	2,000	83%
AJM-24S15		15	1,600	82%
AJM-24S24		24	1,000	85%
AJM-24D12		±12	±1000	84%
AJM-24D15		±15	±800	84%

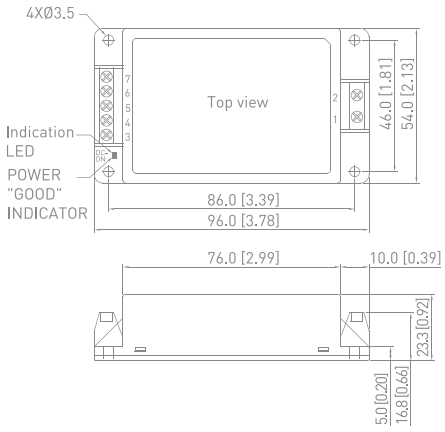
- Fully Encapsulated Plastic Case for PCB, Chassis and DIN-Rail Mounting Version
- Universal Input 85-264VAC, 47-440Hz
- I/O Isolation 4000VAC with Reinforced Insulation
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55011/32 Class B Approved
- EMS Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- Medical EMC Standard with 4th Edition of EMI EN 55011 & EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved
- UL508 Safety Approval Specifically for Industrial Application
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Mechanical Dimensions

PCB



Chassis



Pin Connections (PCB&Chassis)

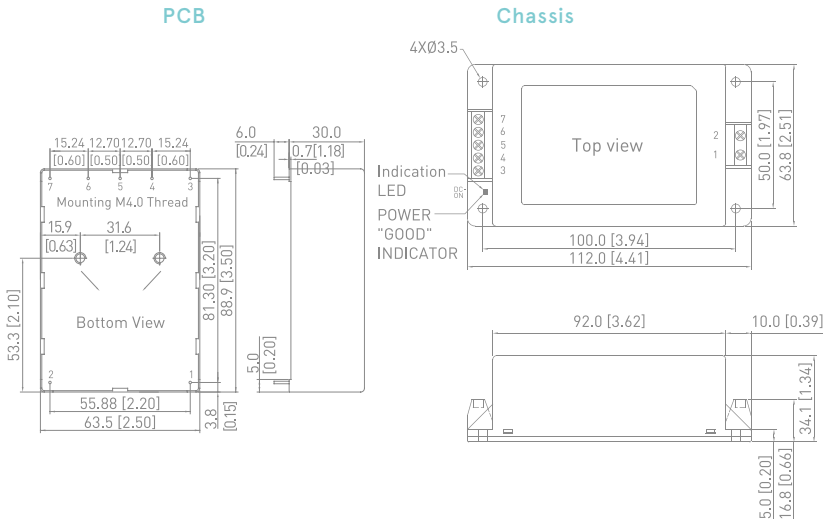
Pin	Single	Dual
1	AC Netural	AC Netural
2	AC Line	AC Line
3	No Pin	No Pin
4	-Vout	-Vout
5	No Pin	Common
6	+Vout	+Vout
7	No Pin	No Pin

APM-40 Series | 40W

Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
APM-40S05	85-264VAC 120-370VDC	5	8,000	81%
APM-40S12		12	3,330	84%
APM-40S15		15	2,660	85%
APM-40S24		24	1,660	84%
APM-40D12		±12	±1660	84%
APM-40D15		±15	±1330	85%

- Fully Encapsulated Plastic Case for PCB, Chassis and DIN-Rail Mounting Version
- Universal Input 85-264VAC, 47-440Hz
- I/O Isolation 4000VAC with Reinforced Insulation
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55011/32 Class B Approved
- EMS Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- Medical EMC Standard with 4th Edition of EMI EN 55011 & EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved
- UL508 Safety Approval Specifically for Industrial Application
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Mechanical Dimensions



Pin Connections (PCB&Chassis)

Pin	PCB	Chassis
1	AC Netural	AC Netural
2	AC Line	AC Line
3	+Vout	+Vout
4	No Pin	No Pin
5	-Vout	Common
6	No Pin	No Pin
7	NC	-Vout

NC: No Connection

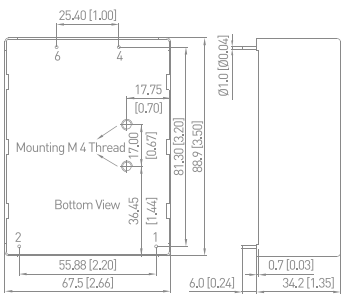
AYM-60 Series | 60W

Model Number	Input Voltage	Output Voltage (VDC)	Output Current (mA)	Efficiency
AYM-60S051	85-264VAC 120-370VDC	5.1	10,000	84%
AYM-60S12		12	5,000	87%
AYM-60S15		15	4,000	87%
AYM-60S24		24	2,500	87%
AYM-60S48		48	1,250	88%

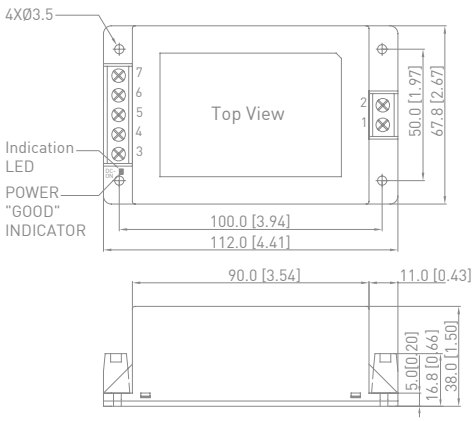
- Fully Encapsulated Plastic Case for PCB, Chassis and DIN-Rail Mounting Version
- Universal Input 85-264VAC, 47-440Hz
- I/O Isolation 4000VAC with Reinforced Insulation
- Wide Operating Temperature Range
- Overload/Voltage and Short Circuit Protection
- EMI Emission EN 55011/32 Class B Approved
- EMS Immunity EN 61000-4-2,3,4,5,6,8,11 Approved
- Medical EMC Standard with 4th Edition of EMI EN 55011 & EMS EN 60601-1-2 Approved
- Medical Safety with 2xMOPP per 3rd Edition of IEC/EN 60601-1 & ANSI/AAMI ES60601-1 Approved
- UL508 Safety Approval Specifically for Industrial Application
- UL/cUL/IEC/EN 62368-1(60950-1) Safety Approval & CE Marking

Mechanical Dimensions

PCB



Chassis



Pin Connections

Pin	Single	Dual
1	AC Netural	AC Netural
2	AC Line	AC Line
3	-	NC
4	+Vout	+Vout
5	-	NC
6	-Vout	-Vout
7	-	NC

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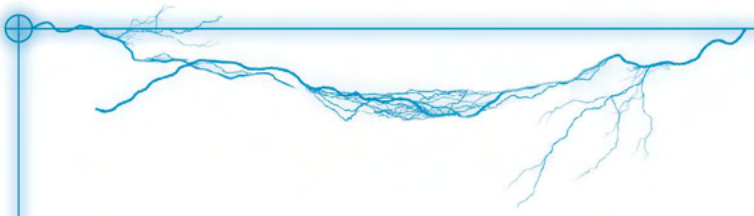

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