

# MAD 24 Series

8 - 10 WATTS SINGLE & DUAL OUTPUT DC/DC INDUSTRIAL

## Features

- 2:1 Input range
- Meet EN55022 class A
- 500 VDC isolation
- 24-pin DIP Package
- Efficiency to 80 %
- Six-sided shield



## Specifications

### INPUT

Nominal voltage	12V, 24V, 48V.
Voltage range	9-18V, 18-36V, 36-72V.
Isolation	500VDC.
Filter	PI-type

### OUTPUT

Power	8W and 10W.
Regulation	Line: $\pm 0.2\%$ max Load: $\pm 1.0\%$ max
Min load	10%.
Load transient response	<480 $\mu$ s.
Setting accuracy	$\pm 1\%$ .
Ripple and noise	Max. 100 mVp-p.
Short circuit protection	Fold-back. Approx 80% of output current at short circuit.
Temp coefficient	$\pm 0.02\%$ /°C.
Efficiency	75% to 82%.

### ENVIRONMENTAL

Operating temperature	-25°C to +71°C.
Storage temperature	-40°C to +100°C.
Cooling	Convection.

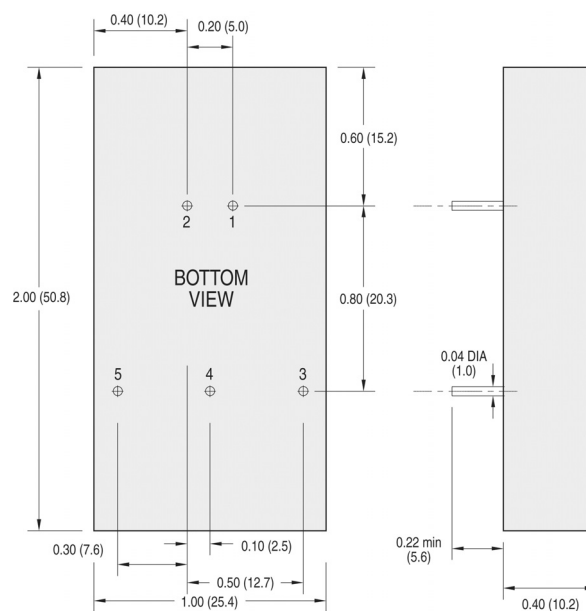
### GENERAL

MTTF	200 000 hours at 25°C ambient.
Switching frequency	Min. 200 kHz.
Equivalent capacitance	3000 pF.
Case	Black coated copper with non-conductive black base.
Dimensions (H x W x L)	10.2 x 25.4 x 50.8 mm.
Weight	35g.

### STANDARDS

EMI standards	EN55022 class A.
C-Tick	AS/NZS CISPR11 Group 1 Class A

## Technical Illustration



All dimensions in Inches (mm)

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<b>POWERBOX ARTICLE NUMBER</b>	<b>INPUT VOLTAGE VDC</b>	<b>OUTPUT VOLTAGE VDC</b>	<b>OUTPUT CURRENT mA</b>	<b>INPUT CURRENT NO LOAD mA</b>	<b>INPUT CURRENT FULL LOAD mA</b>
MAD 24 003	9-18	5	2000	30	1100
MAD 24 006	9-18	12	830	30	1065
MAD 24 009	9-18	15	666	30	1065
MAD 24 012	9-18	±5	1000	40	1065
MAD 24 015	9-18	±12	415	40	1065
MAD 24 018	9-18	±15	333	40	1065
MAD 24 021	18-36	5	2000	20	535
MAD 24 024	18-36	12	830	20	520
MAD 24 027	18-36	15	666	20	520
MAD 24 030	18-36	±5	1000	20	520
MAD 24 033	18-36	±12	415	20	520
MAD 24 036	18-36	±15	333	20	520
MAD 24 039	36-72	5	2000	10	260
MAD 24 042	36-72	12	830	10	254
MAD 24 045	36-72	15	666	10	254
MAD 24 048	36-72	±5	1000	10	254
MAD 24 051	36-72	±12	415	10	254
MAD 24 054	36-72	±15	333	10	254

## Pin Connection

<b>PIN</b>	<b>FUNCTION</b>
1	+V Input
2	-V input
3	+V Output
4	Common/NP
5	-V Output

*NP = No pin on single output.*