

P R B X

POWERBOX Industrial Line
MAD26 Series
10W 4:1 Single and Dual Output
DC/DC Converter

Features

10W isolated output
Efficiency to 82%
4:1 input range
Pi input filter
Continuous short circuit protection
Meets EN55022 Class B, conducted

Input

Input voltage range	24V	9-36V
	48V	18-72V
Input filter	Pi type	

Output

Voltage accuracy	Single output	±1.0% max
	Dual +output	±1.0% max
	Dual -output	±1.0% max
Voltage balance	±1.0% max.	
Transient response	<500µsec, single 25% step load change	
	<500µsec, dual FL-½ ±1% error band	
Temperature coefficient	±0.02%/°C	
Ripple and noise 20MHz BW	75mV p-p max.	
Short circuit protection	Continuous	
Line regulation ¹	±0.5% max.	
Load regulation ²	±1.0% max.	

Environmental

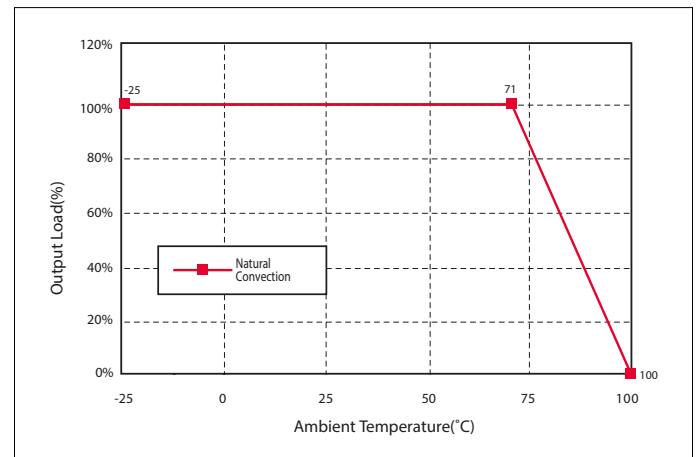
Operating ambient temp.	-25 to +71°C
Humidity	95% of RH non condensing
Derating above 71°C	Linearly to zero power at 100°C
Case temperature ³	100°C max.
Cooling	Natural convection
Storage temperature	-40 to +100°C

General

Efficiency	See table
Isolation voltage	500VDC min.
Isolation resistance	10 ⁹ ohms
MTBF	MIL-STD217F GB, 25°C, full load: 750khrs typ.
Switching frequency	300KHz, typ.
Dimensions	50.8 x 25.4 x 10.2 mm
Weight	32g
Case material	Black coated copper with non-conductive base
EMI/RFI	Six sided continuous shield



Derating Curve



Note:

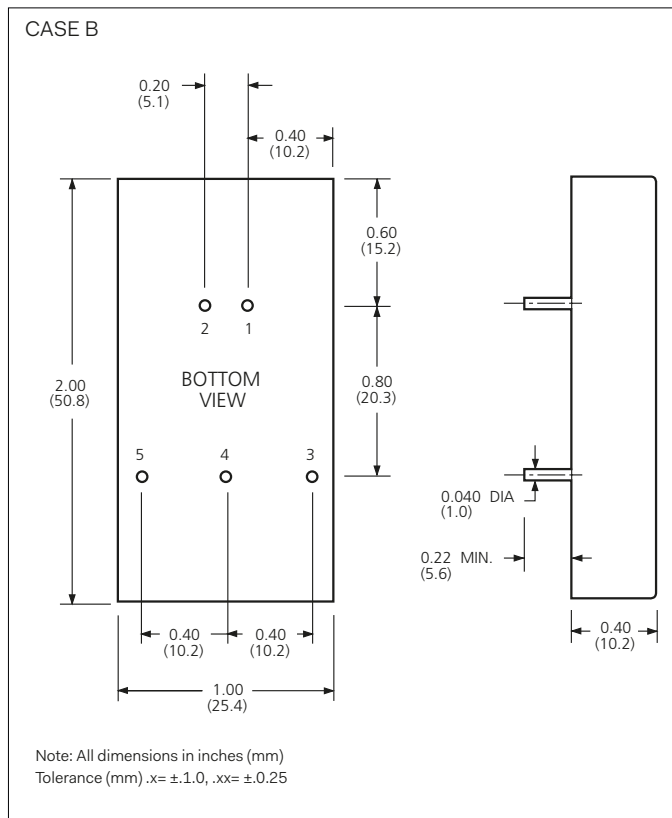
1. Measured from high line to low line.
2. Measured from full load to 1/4 load.
3. Max case temperature under any operating conditions should not be exceeded 100°C.

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Model Number	Input Voltage	Output Voltage	Output Current	Input Current		Efficiency
				No Load	Full Load	
MAD 26 001	9-36 VDC	3.3 VDC	2000 mA	15 mA	362 mA	76%
MAD 26 003	9-36 VDC	5 VDC	2000 mA	15 mA	534 mA	78%
MAD 26 006	9-36 VDC	12 VDC	830 mA	15 mA	520 mA	80%
MAD 26 009	9-36 VDC	15 VDC	666 mA	15 mA	520 mA	80%
MAD 26 019	9-36 VDC	±5 VDC	±1000 mA	20 mA	520 mA	80%
MAD 26 015	9-36 VDC	±12 VDC	±415 mA	20 mA	520 mA	80%
MAD 26 018	9-36 VDC	±15 VDC	±333 mA	20 mA	520 mA	80%
MAD 26 042	18-72 VDC	3.3 VDC	2000 mA	10 mA	181 mA	76%
MAD 26 021	18-72 VDC	5 VDC	2000 mA	10 mA	260 mA	80%
MAD 26 024	18-72 VDC	12 VDC	830 mA	10 mA	257 mA	81%
MAD 26 027	18-72 VDC	15 VDC	666 mA	10 mA	257 mA	81%
MAD 26 039	18-72 VDC	±5 VDC	±1000 mA	15 mA	253 mA	82%
MAD 26 033	18-72 VDC	±12 VDC	±415 mA	15 mA	257 mA	81%
MAD 26 036	18-72 VDC	±15 VDC	±333	15 mA	253 mA	82%

Note:
Nominal input voltages 24 or 48 VDC.

Mechanical



Pin Connection

Pin	Function
1	+Input
2	- Input
3	+Output
4	Common/NP
5	-Output

*NP-No Pin on single output

Specifications are subject to change without notice.