

MAB 03 Series

3 WATTS SINGLE & DUAL OUTPUT DC/DC INDUSTRIAL

Features

- 2:1 Input range
- Meet EN55022 class B
- 500 VDC isolation voltage
- 24-pin DIP Package
- Efficiency to 80 %



Specifications

INPUT

Nominal voltage	12V, 24V, 48V.
Voltage range	9-18V, 18-36V, 36-72V.
Isolation	500VDC (3kV available).
Filter	PI-type

OUTPUT

Power	3W.
Regulation	Line: $\pm 0.5\%$. Load: Single: $\pm 0.5\%$. 10% min load is required to meet specification. Dual: $\pm 1\%$. 25% min load is required to meet specification.
Setting accuracy	$\pm 2\%$.
Ripple and noise	5 V: max. 100 mVp-p. 12/15 V: max. 1% p-p.
Short circuit protection	Fold-back. Approx 80% of output current at short circuit.
Temp coefficient	$\pm 0.05\%/^{\circ}\text{C}$.
Efficiency	70-80 %.

ENVIRONMENTAL

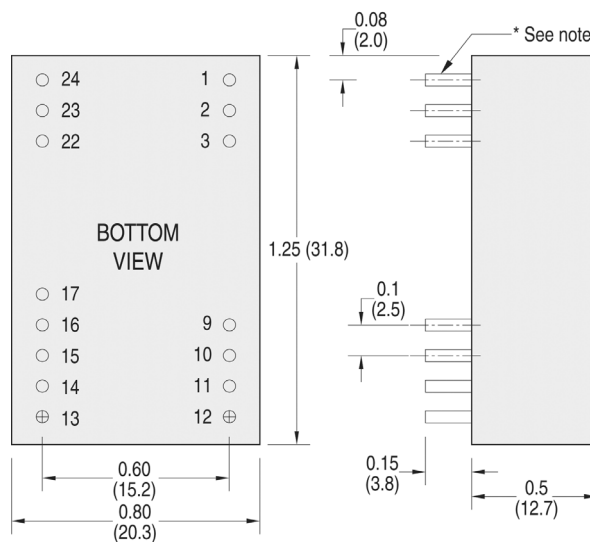
Operating temperature	-25°C to $+71^{\circ}\text{C}$.
Storage temperature	-40°C to $+100^{\circ}\text{C}$.
Cooling	Convection.

GENERAL

MTTF	200 000 hours at 25°C ambient.
Switching frequency	Min. 100 kHz.
Equivalent capacitance	650 pF.
Case	Non-conductive black plastic.
Dimensions (H x W x L)	12.7 x 20.3 x 31.8 mm.
Weight	15g.

STANDARDS

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



* Pin size is 0.020" Inch (0.5mm) DIA or 0.0200x0.14 Inch

All dimensions are in Inches (mm)

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Selection Table

POWERBOX ARTICLE NUMBER	INPUT VOLTAGE VDC	OUTPUT VOLTAGE VDC	OUTPUT CURRENT MA	INPUT CURRENT NO LOAD MA	INPUT CURRENT FULL LOAD MA
MAB 03 024	9-18	3.3	600	7.5	254
MAB 03 027	9-18	5	600	7.5	340
MAB 03 030	9-18	12	250	7.5	320
MAB 03 033	9-18	15	200	7.5	320
MAB 03 036	9-18	±5	300	12	340
MAB 03 039	9-18	±12	125	12	320
MAB 03 042	9-18	±15	100	12	320
MAB 03 045	18-36	3.3	600	5	125
MAB 03 048	18-36	5	600	5	168
MAB 03 051	18-36	12	250	5	156
MAB 03 054	18-36	15	200	5	156
MAB 03 057	18-36	±5	300	7.5	168
MAB 03 060	18-36	±12	125	7.5	156
MAB 03 063	18-36	±15	100	7.5	156
MAB 03 066	36-72	3.3	600	3	61
MAB 03 069	36-72	5	600	2	82
MAB 03 072	36-72	12	250	2	78
MAB 03 075	36-72	15	200	2	78
MAB 03 078	36-72	±5	300	3	82
MAB 03 081	36-72	±12	125	3	80
MAB 03 084	36-72	±15	100	3	80

For isolation voltage 3kV add suffix -H to the article number. Ex MAB 03 024H.

Standard Pin Connection 500VDC

PIN	SINGLE OUTPUT	DUAL OUTPUT
1	+V Input	+V Input
2	NC	-V Output
3	NC	Common
9	NP	NP
10	-V Output	Common
11	+V Output	+V Output
12	-V Input	-V Input
13	-V Input	-V Input
14	+V Output	+V Output
15	-V Output	Common
16	NP	NP
17	NP	NP
22	NC	Common
23	NC	-V Output
24	+V Input	+V Input

NC = No connection with pin.
NP = No pin.

Pin Connection 3KVDC

PIN	SINGLE OUTPUT	DUAL OUTPUT
1	NP	NP
2	-V Input	-V Input
3	-V Input	-V Input
9	NC	Common
10	NC	NC
11	NC	-V Output
12	NP	NP
13	NP	NP
14	+V Output	+V Output
15	NC	NC
16	-V Output	Common
17	NP	NP
22	+V Input	+V Input
23	+V Input	+V Input
24	NP	NP