

# MAC 04 Series

4 - 6 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	5W to 6W.
Regulation	Line: ±0.5%. Load: Single: ±0.5 %. 10% min load is required to meet specification. Dual: ±1%. 25% min load is required to meet specification
Setting accuracy	± 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	±0.05 %/°C.
Efficiency	70-80 %.

### ENVIRONMENTAL

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

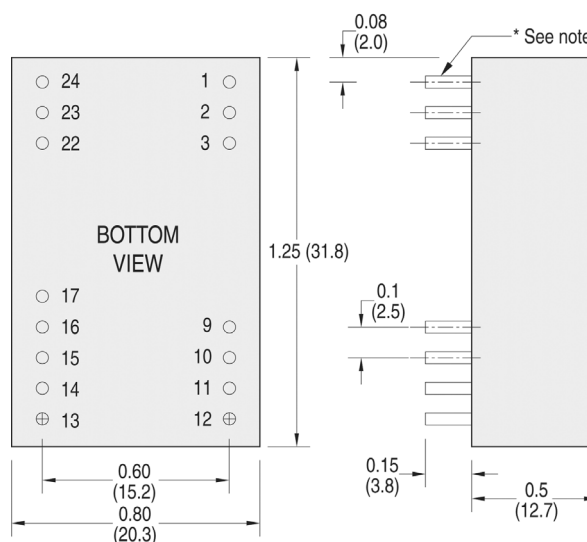
### GENERAL

MTTF	200 000 hours at 25°C ambient.
Switching frequency	Min. 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

## Technical Illustrations



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

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## Selection Table

<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>
MAC 04 003	9-18	3.3	1000	7.5	405
MAC 04 006	9-18	5	1000	7.5	545
MAC 04 009	9-18	12	470	7.5	585
MAC 04 012	9-18	15	400	7.5	625
MAC 04 015	9-18	±5	500	12	545
MAC 04 018	9-18	±12	230	12	575
MAC 04 021	9-18	±15	190	12	590
MAC 04 024	18-36	3.3	1000	5	195
MAC 04 027	18-36	5	1000	5	265
MAC 04 030	18-36	12	470	5	285
MAC 04 033	18-36	15	400	5	305
MAC 04 036	18-36	±5	500	7.5	265
MAC 04 039	18-36	±12	230	7.5	285
MAC 04 042	18-36	±15	190	7.5	295
MAC 04 045	36-72	3.3	1000	2	98
MAC 04 048	36-72	5	1000	2	133
MAC 04 051	36-72	12	470	2	145
MAC 04 054	36-72	15	400	2	154
MAC 04 057	36-72	±5	500	3	265
MAC 04 060	36-72	±12	230	3	142
MAC 04 063	36-72	±15	190	3	147

For isolation voltage 3kV add suffix -H to the article number. Ex MAC 04 003H.

## Standard Pin Connection 500VDC

<b>PIN</b>	<b>SINGLE OUTPUT</b>	<b>DUAL OUTPUT</b>
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

## Pin Connection 3KVDC

<b>PIN</b>	<b>SINGLE OUTPUT</b>	<b>DUAL OUTPUT</b>
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