

# MAH 16 Series

17-30 WATTS SINGLE & MULTI OUTPUT DC/DC INDUSTRIAL

## Features

- 2:1 Input range
- Efficiency to 85 %
- 300 kHz switching frequency
- Remote ON/OFF control
- 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	17W, 25W, 30W.
Regulation	Line: Single/Dual $\pm 0.5\%$ max Triple $\pm 1.0\%$ max
Load transient response	<480 $\mu$ s.
Setting accuracy	Single: $\pm 2.0$ max Dual: $\pm 2.0\%$ & $\pm 3\%$ Triple: $\pm 2\%$ & $\pm 5\%$ max
Ripple and noise	Max. 75 mVp-p.
Short circuit protection	Fold-back. Approx 80% of output current at short circuit.

Temp coefficient	$\pm 0.02$ %/°C.
Efficiency	75% to 85%.

### ENVIRONMENTAL

Operating temperature	-25°C to +71°C.
Storage temperature	-55°C to +105°C.
Cooling	Convection.

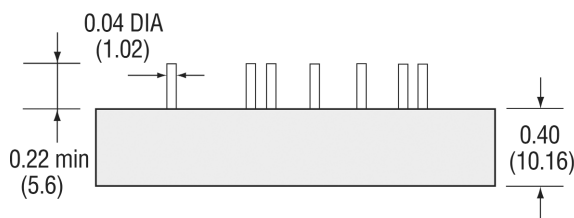
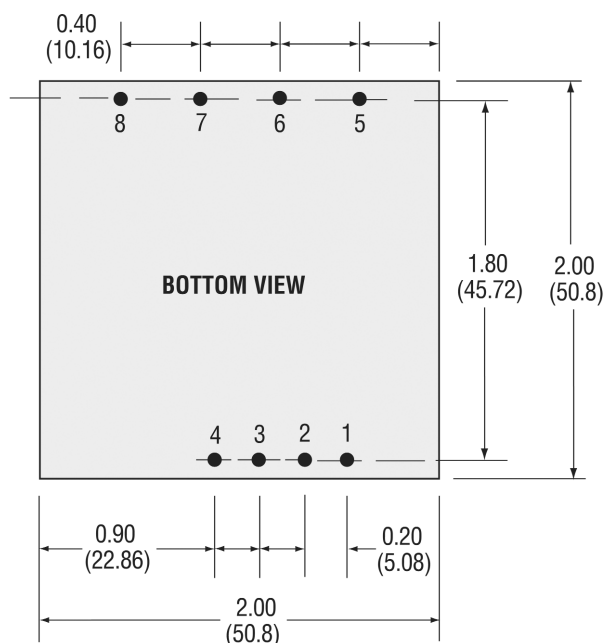
### GENERAL

MTTF	200 000 hours at 25°C ambient.
Switching frequency	Min. 300 kHz.
Equivalent capacitance	1400 pF.
Case	Black coated copper with non-conductive base.
Dimensions (H x W x L)	10.2 x 50.8 x 50.8 mm.
Weight	65g.

### STANDARDS

C-Tick	AS/NZS CISPR11 Group 1 Class A
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## Technical Illustration



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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
MAH 16 003	9-18	3.3	5000	30	1860
MAH 16 006	9-18	5	5000	30	2675
MAH 16 009	9-18	12	2500	30	3050
MAH 16 012	9-18	15	2000	30	3050
MAH 16 015	9-18	±5	2500	35	2675
MAH 16 018	9-18	±12	1250	35	3050
MAH 16 021	9-18	±15	1000	35	3050
MAH 16 024	9-18	5/ ±12	3500/310	35	2640
MAH 16 027	9-18	5/ ±15	3500/250	35	2640
MAH 16 030	18-36	3.3	5000	30	920
MAH 16 033	18-36	5	5000	30	1336
MAH 16 036	18-36	12	2500	30	1525
MAH 16 039	18-36	15	2000	30	1525
MAH 16 042	18-36	±5	2500	30	1336
MAH 16 045	18-36	±12	1250	30	1470
MAH 16 048	18-36	±15	1000	30	1470
MAH 16 051	18-36	5/ ±12	3500/310	30	1320
MAH 16 054	18-36	5/ ±15	3500/250	30	1320
MAH 16 057	36-72	3.3	5000	20	460
MAH 16 060	36-72	5	5000	20	660
MAH 16 063	36-72	12	2500	20	765
MAH 16 066	36-72	15	2000	20	765
MAH 16 069	36-72	±5	2500	25	660
MAH 16 072	36-72	±12	1250	25	735
MAH 16 075	36-72	±15	1000	25	735
MAH 16 078	36-72	5/ ±12	3500/310	25	655
MAH 16 081	36-72	5/ ±15	3500/250	25	655

## Pin Connection

PIN	SINGLE OUTPUT	DUAL OUTPUT	TRIPLE OUTPUT
1	Remote On/Off Control		
2	NP	NP	NP
3	-V Input	-V Input	-V Input
4	+V Input	+V Input	+V Input
5	Trim	Trim	-Aux. Out
6	-V Output	-V Output	Common
7	+V Output	Common	+5V Output
8	NP	+V Output	+Aux. Out

### REMOTE ON/OFF CONTROL

Logic compatibility	CMOS or open collector TTL
Output-On	>5.5VDC or open circuit
Output-Off	<1.8VDC
Shutdown idle current	10mA
Input resistance	100K ohms (Ein 0 to 9VDC)
Control common	Referenced to input minus

### EXTERNAL OUTPUT TRIMMING

Output may optionally be externally trimmed ( $\pm 10\%$ ) with a fixed resistor or an external trimpot as shown.

