

# MAE 34 Series

15 WATTS - DC/DC SINGLE & MULTI OUTPUT

## FEATURES

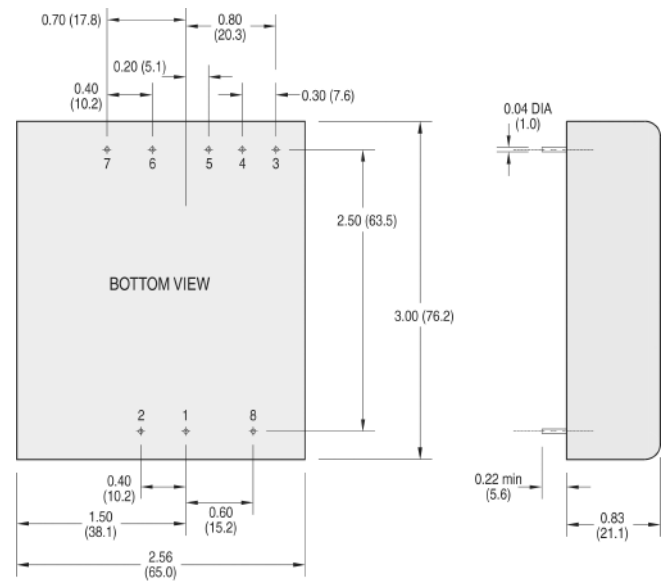
- 4:1 Input range
- Efficiency to 82%
- 200 kHz switching frequency
- Remote ON/OFF control
- Six-sided shield
- Pi input filter
- Isolated output
- Isolation 500VDC
- Regulated output



## SPECIFICATIONS

INPUT	
Nominal voltage	12V, 24V, 48V.
Voltage range	9-36V, 18-72V.
Isolation	500VDC.
Filter	PI-type
OUTPUT	
Power	15W.
Regulation	Line: Single/Dual $\pm 0.2\%$ , triple $\pm 1.0\%$ Load: Single/Dual $\pm 1.0\%$ , triple $\pm 5.0\%$
Load transient response	$<480\mu\text{s}$ .
Setting accuracy	Single: $\pm 1.0\%$ Dual 1.0% & $\pm 15.0\%$ Triple: $\pm 1.0\%$ 15.0%
Ripple and noise	Max. 75 mVp-p.
Short circuit protection	Fold-back. Approx 80% of output current at short circuit.
Temp coefficient	$\pm 0.02\% / ^\circ\text{C}$ .
Efficiency	77% to 83%.
ENVIRONMENTAL	
Operating temperature	$-25^\circ\text{C}$ to $+71^\circ\text{C}$ .
Storage temperature	$-55^\circ\text{C}$ to $+105^\circ\text{C}$ .
Cooling	Convection.
GENERAL	
MTTF	200 000 hours at $25^\circ\text{C}$ ambient.
Switching frequency	Min. 200 kHz.
Equivalent capacitance	1000 pF.
Case	Black coated copper with non-conductive base.
Dimensions (H x W x L)	21.1 x 65.0 x 76.2 mm.
Weight	180g.

## TECHNICAL ILLUSTRATION



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	FULL LOAD INPUT CURRENT
MAE 34 003	9-36	5	3000	15	810
MAE 34 006	9-36	12	1250	15	780
MAE 34 009	9-36	15	1000	15	780
MAE 34 012	9-36	±12	625	20	780
MAE 34 015	9-36	±15	500	20	780
MAE 34 018	9-36	5/±12	1500/310	20	780
MAE 34 021	9-36	5/±15	1500/250	20	780
MAE 34 024	9-36	+5/+12/-5	1500/310/500	20	715
MAE 34 027	18-72	5	3000	10	410
MAE 34 030	18-72	12	1250	10	390
MAE 34 033	18-72	15	1000	10	390
MAE 34 036	18-72	±12	625	15	380
MAE 34 039	18-72	±15	500	15	380
MAE 34 042	18-72	5/±12	1500/310	15	380
MAE 34 045	18-72	5/±15	1500/250	15	380
MAE 34 048	18-72	+5/+12/-5	1500/310/500	15	350

## PIN CONNECTION

PIN	SINGLE OUTPUT	DUAL OUTPUT	TRIPLE OUTPUT
1	+V Input	+V Input	+V Input
2	-V Input	-V Input	-V Input
3	NP	+V Output	+V Output
4	Output trim	Common	Common
5	NP	-V Output	-V Output
6	+V Output	NP	+5V Output
7	-V Output	NP	NP
8	Remote on/off control		

NP = No pin.

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 (±10%) with a fixed resistor or an external trimpot as shown.	

