



Available
 Through
 Distribution

T-57-11

The MA Series is ideally suited for applications in telecommunications, distributed power systems, point of use regulation, automatic test equipment, geosource test equipment, process control, etc.



Special Features Electrical Specifications

- MOSFET design
- 4:1 ultra wide input range
- Surface mount technology
- Continuous short circuit protection
- Regulated outputs
- Efficiency 75% (typ)
- Output voltage tracking (dual outputs)

The new MA family features the latest in MOSFET design and state-of-the-art surface mount technology. Utilizing both technologies has enabled our design engineers to reduce the unit surface area by 50% over competitive products with similar power levels. Features include a 4:1 ultra-wide input range; efficiencies to 80%; continuous short circuit protection with auto restart; I/O isolation of 500 Vdc; operating temperature range of -25°C to +71°C; and a six-sided, shielded, low profile case measuring 1.0" x 2.0" x 0.400".

Input	
Vin - nominal	5, 24, 48
Voltage range	4.5 - 5.25 Vdc, 9 - 36 Vdc, 20 - 72 Vdc
Input filtering	LC
Output	
Voltage tolerance	± 1.5%
Voltage balance	Within ± 1% (dual outputs)
Ripple and noise	50 mV p-p (max)*
Short circuit protection	Continuous, auto restart
Temperature coefficient	0.02% / °C max

General	
Regulation:	
Line	± 0.25%
Load	± 0.5%
Efficiency	75% (typ)
I/O isolation	500 Vdc
Switching frequency	250 kHz 5 Vin models 170 kHz wide Vin models

Environmental Notes

Operating temperature range:
 -25°C to +71°C

Storage temperature:
 -40°C to +105°C

Cooling:
 Free air convection

* Measured with 3.3 µF 25 V tantalum capacitor across each output.

All specifications are typical at nominal line and full load at +25°C unless otherwise noted.

Specifications subject to change without notice.

DC/DC
 Converters
 4.5 Watts
 MA Series



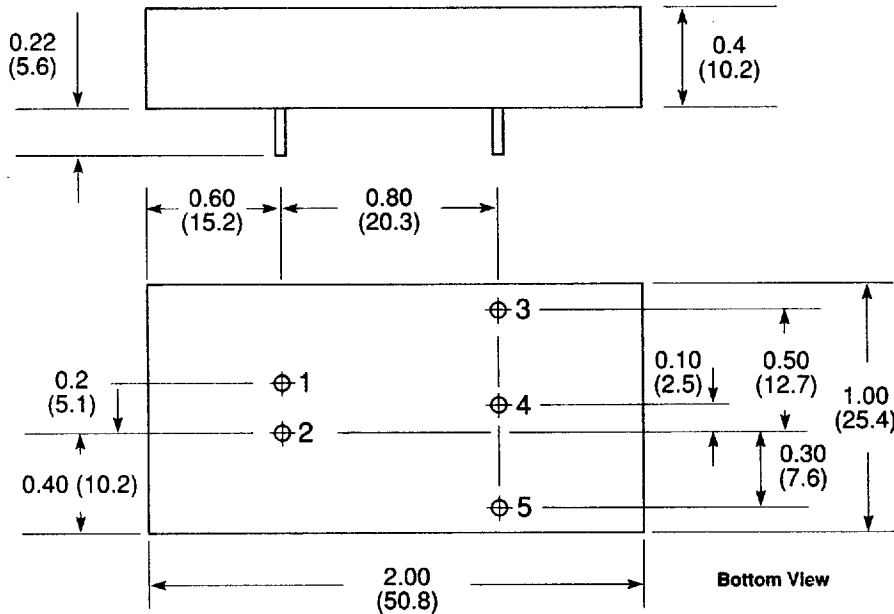
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Ordering Information

	Input Voltage	Output Voltage	Output Current	Model Number	SCI Equivalent Model Number	Regulation % Line ± Load ±
Single	4.5 - 5.25 V	5 Vdc	750 mA	MAS2075-2	QA11-075-5	0.25 0.5
	4.5 - 5.25 V	12 Vdc	375 mA	MAS3037-2	QA12-037-5	0.25 0.5
	4.5 - 5.25 V	15 Vdc	300 mA	MAS4030-2	QA13-030-5	0.25 0.5
	9 - 36 V	5 Vdc	750 mA	MAS2075-8	QA11-075-18	0.25 0.5
	9 - 36 V	12 Vdc	375 mA	MAS3037-8	QA12-037-18	0.25 0.5
	9 - 36 V	15 Vdc	300 mA	MAS4030-8	QA13-030-18	0.25 0.5
	20 - 72 V	5 Vdc	750 mA	MAS2075-9	QA11-075-48	0.25 0.5
	20 - 72 V	12 Vdc	375 mA	MAS3037-9	QA12-037-48	0.25 0.5
	20 - 72 V	15 Vdc	300 mA	MAS4030-9	QA13-030-48	0.25 0.5
Dual	4.5 - 5.25 V	± 12 Vdc	± 185 mA	MAD3037-2	QA22-037-5	0.25 0.5
	4.5 - 5.25 V	± 15 Vdc	± 150 mA	MAD4030-2	QA23-030-5	0.25 0.5
	9 - 36 V	± 12 Vdc	± 185 mA	MAD3037-8	QA22-037-18	0.25 0.5
	9 - 36 V	± 15 Vdc	± 150 mA	MAD4030-8	QA23-030-18	0.25 0.5
	20 - 72 V	± 12 Vdc	± 185 mA	MAD3037-9	QA22-037-48	0.25 0.5
	20 - 72 V	± 15 Vdc	± 150 mA	MAD4030-9	QA23-030-48	0.25 0.5

Drawings



Pin Assignments

Single Output	Dual Output
Pin 1 +Input	Pin 1 +Input
Pin 2 -Input	Pin 2 -Input
Pin 3 +Output	Pin 3 +Output
Pin 4 No pin	Pin 4 Common
Pin 5 -Output	Pin 5 -Output

Notes

- All dimensions are in inches and (mm).
- Pins 0.040 dia. x 0.20 (5.1) Lg Min.
- Case connected to -Output (singles) and Output Common (duals).