

300 Watt

2.4x2.28 Inch Package M
4:1 Input Range



- o High Efficiency up to 89%
- o Regulated Single Output
- o Remote ON/OFF
- o Over Temperature Protection
- o Over Voltage/Current Protection
- o Half-Brick Size meet Industrial Standard
- o Full Isolated I/O 3000 VAC
- o Off-line Systems using PFC front-ends
- o CE Mark meets 2014/30/EC
- o Designed to meet UL60950-1, EN60950-1 and IEC60950-1
- o CE Mark Meets 2014/30/EU



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT MAX.	INPUT CURRENT		%EFF	CAPACITOR LOAD MAX.
				NO LOAD	FULL LOAD		
300MRS300X5LC	180-425VDC	5 VDC	60 A	10 mA	1.92 A	87	10000 µF
300MRS300X12LC		12 VDC	25 A			88	
300MRS300X24LC		24 VDC	12.5 A		89	6000 µF	
300MRS300X28LC		28 VDC	10.7 A				
300MRS300X48LC		48 VDC	6.25 A				3000 µF

NOTE:

1. Nominal Input Voltage 300 VDC.
2. An external input capacitor 180 µF for all models are recommended to reduce input ripple voltage.
3. Measure at nominal input voltage.

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS

Input Voltage Range	300 VDC	180-425 VDC
Input Over Voltage Protection	Module ON Module OFF	440 VDC 450 VDC
Undervoltage lockout	300 V _{in} power up 300 V _{in} power down	175 V 160 V
Positive Logic Remote ON/OFF ¹⁾	Logic Compatibility Module ON Module OFF	Open Collector Ref. to -Input >3.5 VDC to 75 VDC or Open Circuit 0 to 1.2 VDC
Input Filter		Pi Type

OUTPUT SPECIFICATIONS

Voltage Accuracy		±1.0% max.
Transient Response	25% Step Load Change	<250 μ sec.
External Trim Adj. Range		+10%, -20%
Ripple and Noise at 20 MHz BW ²⁾	5 V	75 mV RMS max. 1200 mV p-p max.
	12 V	60 mV RMS max. 150 mV p-p max.
	24 V	120 mV RMS max. 240 mV p-p max.
	28 V	150 mV RMS max. 280 mV p-p max.
	48 V	200 mV RMS max. 480 mV p-p max.
Temperature Coefficient		±0.03%/°C
Short Circuit Protection		Continuous
Line Regulation ³⁾		±0.2% max.
Load Regulation ⁴⁾		±0.5% max.
Over Voltage Protection trip Range, % V _o nom.		115-140%
Current Limit		105% ~ 140% Nominal Output
Start up Time		150 ms

NOTE:

1. Suffix "N" to the model number with negative logic remote ON/OFF.

Module ON 0 VDC to 1.2 VDC

Module OFF >3.5 VDC to 75 VDC or Open Circuit

2. Output Ripple and Noise measured with 10 μF tantalum and 1 μF ceramic capacitor across output.

3. Measured from High Line to Low Line.

3. Measured from Full Load to Zero Load.

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GENERAL SPECIFICATION

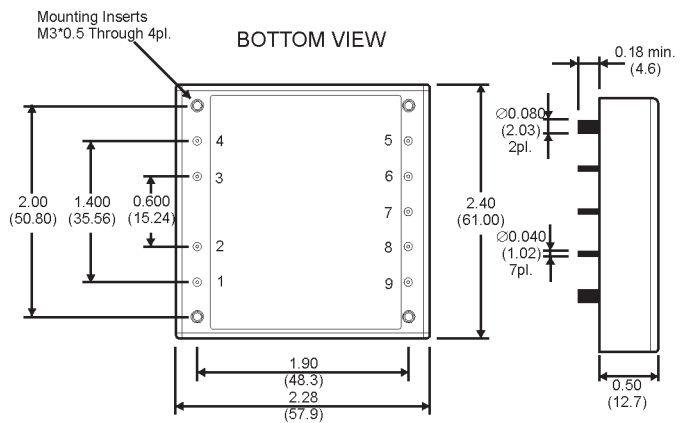
Efficiency		see table
Isolation Voltage	Input / Output Input / Case Output / Case	3000 VAC min. 2500 VAC min. 500 VAC min.
Isolation Resistance		10 ⁷ Ohms min.
Switching Frequency		300 kHz
Operating Case Temperature Range		-40°C to +100°C
Storage Temperature Range		-55°C to +105°C
Thermal Shutdown (Case Temperature)		+105°C
Humidity		95% RH max. Non Condensing
MTBF (MIL-HDBK-217F, GB, 25°C, Full Load)		T.B.D.
Dimensions		2.28 x 2.40 x 0.52 Inches (57.9 x 61.0 x 13.2 mm)
Case Material		Aluminum Base Plate with Plastic Case
Weight		T.B.D.

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MECHANICAL SPECIFICATIONS

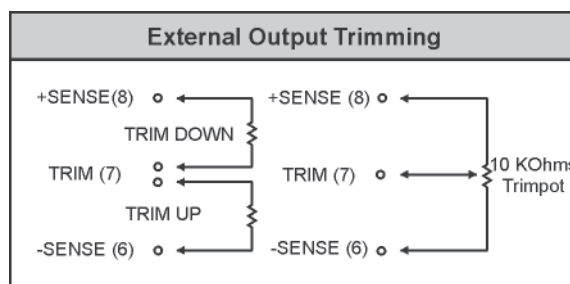
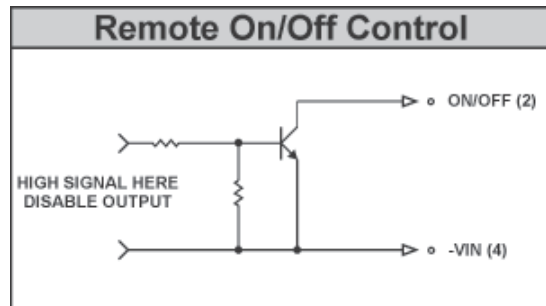
Case „M“



All Dimensions in Inches (mm).
Tolerance: x.xx=±0.02, x.xxx=±0.010 Inches
(x.x=±0.5, x.xx=±0.250 mm)

PIN CONNECTIONS	
1	+INPUT
2	ON/OFF
3	NO PIN
4	-INPUT
5	-OUTPUT
6	-SENSE
7	TRIM
8	+SENSE
9	+OUTPUT

DIAGRAMS



NOTICE:
The information in this document has been carefully checked. However, no responsibility is assumed for inaccuracies!
Specifications can be changed without notice. The latest and most complete information can be found on our website.