MPM-60SVI

Compact, Wide Input, 60W, High Isolation AC/DC Power Supplies



Key Features:

- 60W Output Power
- Universal 90-305 VAC Input
- 4,300 VAC Isolation
- Compact Size
- EN 62368 Approved (UL)
- 90% Efficiency
- OVC Category III
- -40°C to +85°C Temp Range
- Meets EN 55032 B
- >300 kHour MTBF
- Isolation Class II

MicroPower Direct

MICROPOWER DIRECT

Electrical Specifications

Specifications typical @ +25°C, 230 VAC input voltage & rated output current, unless otherwise noted. Specifications subject to change without notice.

Input

Parameter	Conditions	Min.	Typ.	Max.	Units
Input Voltage Range, See Note 1		90		305	VAC
		120		430	VDC
Input Frequency		47		63	Hz
Input Current	See Model Selection Guide				
Inrush Current, <2ms	115 VAC			45.0	A Pk
	230 VAC			90.0	
Leakage Current	100 - 240 VAC			0.25	mA
No Load Power Consumption	115/230 VAC			<0.1	W

Output

Parameter	Conditions	Min.	Typ.	Max.	Units
Output Voltage Accuracy			±2.0		%
Line Regulation	VIN = Min to Max		±0.5		%
Load Regulation	0 to 100%		±1.0		%
Minimum Load			0		%
Ripple/Noise, See Note 1	12V Output		120		mVP-P
	15V Output		150		
	24V Output		240		
Hold-Up Time	230 VAC	30			mSec
Temperature Coefficient			±0.05		%/°C
Over Voltage Protection	Zener Diode Clamp				
Over Power Protection	Autorecovery				
Short Circuit Protection, See Note 2	Hiccup Mode (Autorecovery)				

General

Parameter	Conditions	Min.	Typ.	Max.	Units
Isolation Voltage	Input to Output	4,300			VAC
EMC	EMI (Conducted/Radiated Emmisions)				EN 55032 Level B
	EMS (Noise Immunity)				EN 55035

Environmental

Parameter	Conditions	Min.	Typ.	Max.	Units
Operating Temperature Range	(See Derating Curve)	-40	+25	+85	°C
Storage Temperature Range		-40		+85	°C
Cooling	Free Air Convection (See Derating Curve)				
Humidity	RH, Non-condensing			95	%
Altitude During Operation				5,000	m

Physical

Case Size & Weight	See Mechanical Diagram (Page 2)
Case Material	Non-Conductive Plastic Resin (UL94-V0)

Reliability Specifications

Parameter	Conditions	Min.	Typ.	Max.	Units
MTBF	MIL HDBK 217F, 25°C, Gnd Benign	300			kHours
Safety Standards	UL/cUL 62368-1 recognition (UL certificate)				
Over Voltage Category	III: Compliance to EN 61558, Altitude to 2,000 meters				
Vibration	IEC 60068-2-6, 10-500 Hz, 2G 10 min/1 cycle, 60 min each along X, Y, Z axis				
Shock	IEC 60068-2-27				

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CompuMess Elektronik
Power mit System

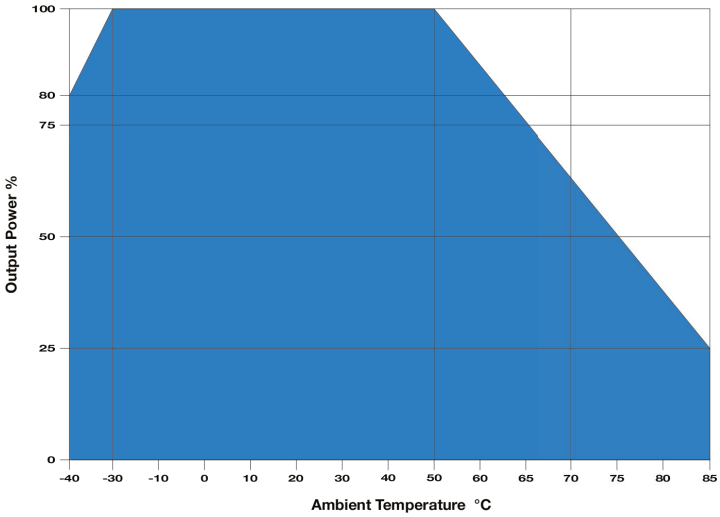
Model Selection Guide

Model Number	Input		Output			Capacitive Load (μF, Max)	Efficiency (230 VAC, %, Typ)
	Current (mA Max)		Voltage (VDC)	Current (mA Max)	Power (W)		
	115 VAC	230 VAC					
MPM-60SVI-12	1,500	1,000	12.0	5,000	60.0	6,000	90
MPM-60SVI-15	1,500	1,000	15.0	4,000	60.0	5,000	90
MPM-60SVI-24	1,500	1,000	24.0	2,500	60.0	1,200	90

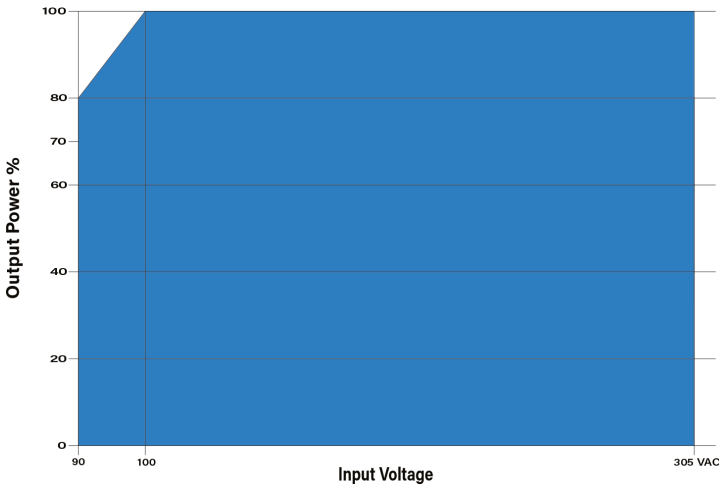
Notes:

1. Ripple and noise are measured at 20 Mhz bandwidth with a 0.1μF and a 47 μF capacitor connected in parallel as close to the unit output terminals as possible.
2. Output short circuit protection is provided by a "hiccup mode" circuit. The unit recovers automatically when the fault condition is removed.
3. **Caution:** The unit uses Double Pole neutral fusing. Disconnect the mains before servicing. For more information, contact the factory.

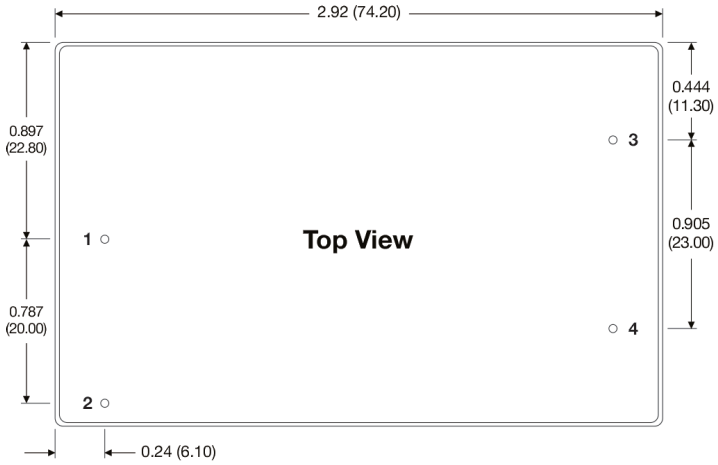
Power Derating Curve, Temperature



Power Derating Curve, Input Voltage



Mechanical Dimensions

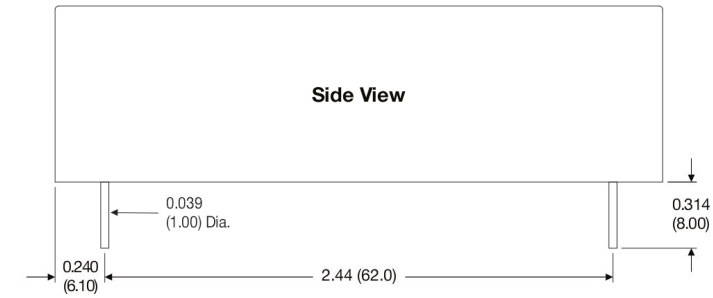


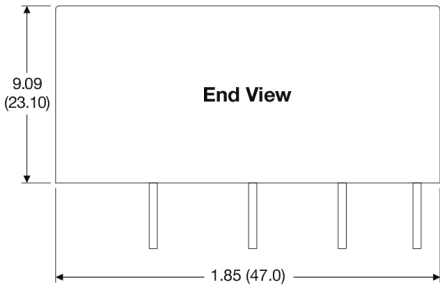
Pin Connections

Pin	Function
1	AC-Neutral
2	AC-Line
3	-VOUT
4	+VOUT

Notes:

- All dimensions are typical in inches (mm)
- Tolerance x.xx = ±0.02 (±0.50)
- Module Weight is: 5.57 Oz (158g)





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