

MPM-60PB Series

Single Output, 60W Compact "Power Brick" AC/DC Power Supplies



Key Features:

- 60W Output Power
- High Power Density Case
- Universal 85-265 VAC Input
- EN 60950 Approved (UL)
- -40°C to + 70°C Operation
- Meets EN 55022 B
- 4,000 VAC I/O Isolation
- >130 kHour MTBF



MicroPower Direct

292 Page Street
Suite D
Stoughton, MA 02072
USA

T: (781) 344-8226
F: (781) 344-8481
E: sales@micropowerdirect.com
W: www.micropowerdirect.com



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		85		265	VAC	
		100		370	VDC	
Input Frequency		47		63	Hz	
Input Current	See Model Selection Guide					
Inrush Current	115 VAC		30.0		A Pk	
	230 VAC		50.0			
Leakage Current				0.5	mA	
EMI	Meets CISPR Pub. 22/FCC Class B					
EMC	Meets EN 55024					

Output						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Output Voltage	See Model Selection Guide					
Output Current	See Model Selection Guide					
Output Voltage Accuracy			±2.0		%	
Output Voltage Adjustment			±10.0		%	
Line Regulation	V _{IN} = Min to Max		±1.0		%	
Load Regulation	I _o = 5% to 100%		±1.0		%	
Ripple (20 MHz), See Note 1		<±0.2% V _{out} + 40 mV			mVP-P	
Noise, See Note 1		<±0.5% V _{out} + 50 mV			mVP-P	
Hold-Up Time	115 VAC		10		mSec	
	230 VAC		60			
Temperature Coefficient			±0.02		%/°C	
Over Voltage Protection	Zener Diode Clamp		120		% of V _o	
Short Circuit Protection, See Note 2	Continuous (Autorecovery)					
Overload Protection		150			% of I _o	

General						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Isolation Voltage	Input to Output	4,000			VAC	
	Input to FG	1,500				
	Output to FG	500				
Isolation Resistance	500 VDC	100			MΩ	
EMC Compliance	EMI/RFI	Conducted EN 55022 Level B				
		Electrostatic Discharge (ESD) EN 61000-4-2 Level B				
		RF Field Susceptibility EN 61000-4-3				
		Electrical Fast Transients/Bursts On Mains EN 61000-4-4 Level 3 2 kV				
Switching Frequency	Surge		100		kHz	

Environmental						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Operating Temperature Range	Ambient	-40	+25	+70	°C	
Storage Temperature Range		-50		+85	°C	
Cooling	Free Air Convection (See Derating Curve)					
Humidity	RH, Non-condensing			95	%	

Physical						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Case Size		4.30 x 2.30 x 1.18 Inches (109.0 x 58.5 x 30.0 mm)				
Case Material	Non-Conductive Plastic & Fiberglass (UL94-V0)					
Weight					10.92 Oz (310g)	

Reliability Specifications						
Parameter	Conditions	Min.	Typ.	Max.	Units	
MTBF	MIL HDBK 217F, 25°C, Gnd Benign	130			kHours	
Safety Standards	UL 60950, EN 60950					
Safety Approvals	UL, cUL; File No. E245422					

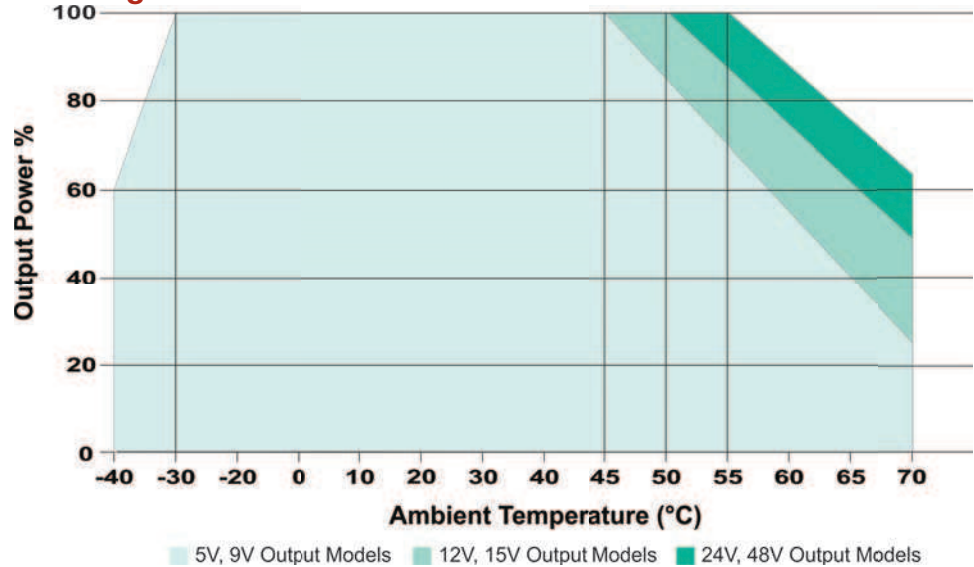
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Model Number	Input		Output			Maximum Capacitive Load (μF)	Maximum Output Power (W)	Efficiency (% Typ)
	Current (A)		Voltage (VDC)	Current				
	115 VAC	230 VAC		Max. (A)	Min. (%)			
MPM-60S-05PB	2.0	1.0	5.0	10.0	1.0	80,000	50.0	82
MPM-60S-09PB	2.0	1.0	9.0	6.66	1.0	28,000	60.0	84
MPM-60S-12PB	2.0	1.0	12.0	5.00	1.0	14,000	60.0	86
MPM-60S-15PB	2.0	1.0	15.0	4.00	1.0	12,000	60.0	86
MPM-60S-24PB	2.0	1.0	24.0	2.50	1.0	4,000	60.0	86
MPM-60S-48PB	2.0	1.0	48.0	1.25	1.0	950	60.0	86

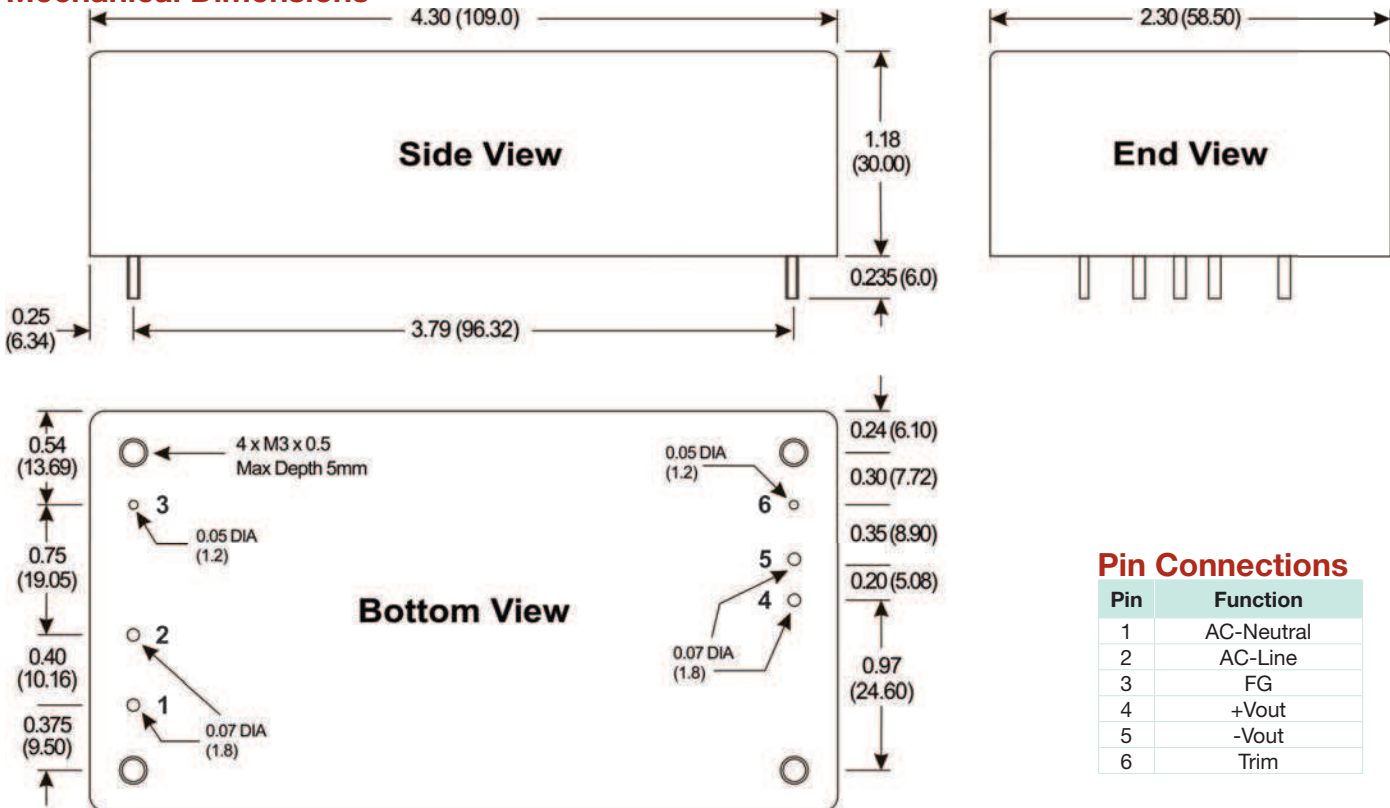
Notes:

- 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.
- Output short circuit protection is provided by a "hiccup mode" circuit. The unit recovers automatically when the fault condition is removed.
- Operation at under no load conditions will not damage these units.
- It is recommended that a fuse be used on the input of a power supply for protection. For the **MPM-60PB** series, a 4A/250 VAC slow blow should be used.

Derating Curve



Mechanical Dimensions



Notes:

- All dimensions are typical in inches (mm)
- Tolerance x.xx = ±0.01 (±0.25)