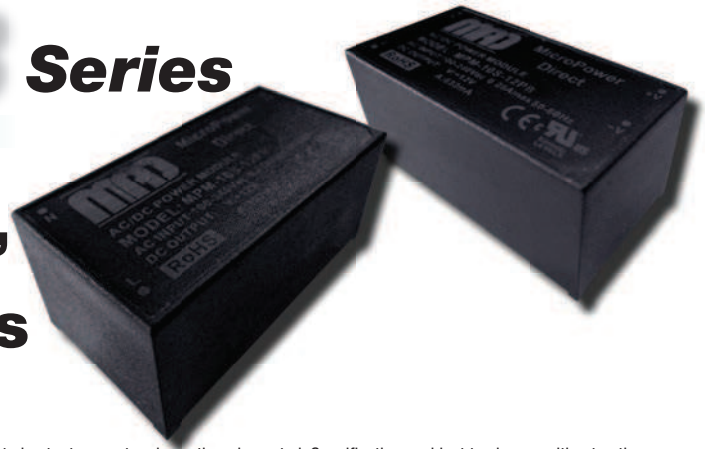


MPM-10PB Series

Single Output, 10W Compact "Power Brick" AC/DC Power Supplies



Key Features:

- 10W Output Power
- Universal 85-264 VAC Input
- EN 60950 Approved (UL)
- Meets IEC Safety Class II
- Meets EN 55022 B
- Meets ErP Directive
- Industry Standard Pin-Out
- >300 kHour MTBF



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		264	VAC	
Input Frequency		120		370	VDC	
Input Current		47		440	Hz	
Inrush Current	See Model Selection Guide					
	115 VAC			15.0	A Pk	
	230 VAC			30.0	A Pk	
No Load Power Consumption				0.3	W	
Output						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Output Voltage	See Model Selection Guide					
Output Current	See Model Selection Guide					
Output Voltage Accuracy				±2.0	%	
Line Regulation	V _{IN} = Min to Max			±1.0	%	
Load Regulation	I _{OUT} = 10% to 100%			±1.0	%	
Ripple & Noise (20 MHz), See Note 1	3.3V and 5V Models		1.5	1.8	% V _{P-P} of V _{OUT}	
	12V, 15V, and 24V Models		0.8	1.0	% V _{P-P} of V _{OUT}	
Hold-Up Time	115 VAC		20		mSec	
	230 VAC		60		mSec	
Temperature Coefficient			±0.01	±0.02	%/°C	
Over Voltage Protection	Zener Diode Clamp		120		% V _{OUT}	
Over Temperature Protection	Autorecovery (at 67 °C)		90		°C	
Short Circuit Protection	Continuous (Autorecovery)					
Overload Protection	Foldback, Autorecovery	105			% W	
General						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Isolation Voltage	Input to Output	3,000			VAC	
Isolation Resistance	500 VDC	100			MΩ	
Switching Frequency			125		kHz	
EMI Characteristics						
Parameter	Standard	Min.	Typ.	Max.	Units	
Radiated Emissions	EN 55022			Class B		
Conducted Emissions	EN 55022			Class B		
ESD	EN 61000-4-2			Criteria B; ±8 kV Air/±4 kV Contact		
RS	EN 61000-4-3			Criteria A; 10V/m		
EFT	EN 61000-4-4			Criteria B; ±2 kV		
Surge	EN 61000-4-5			Criteria B; ±1 kV		
CS	EN 61000-4-6			Criteria B; 10 Vrms		
PFM	EN 61000-4-8			Criteria A; 30A/m		
Voltage Dips	EN 61000-4-11			Criteria B; 10 mS		
Environmental						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Operating Temperature Range	Ambient	-25	+25	+70	°C	
Storage Temperature Range		-40		+105	°C	
Cooling	Free Air Convection (See Derating Curve)					
Humidity	RH, Non-condensing			85	%	
Physical						
Case Size		2.06 x 1.07 x 0.93 Inches (52.4 x 27.2 x 23.50 mm)				
Case Material		Non-Conductive Black Plastic (UL94-V0)				
Weight		1.90 Oz (54g)				
Reliability Specifications						
Parameter	Conditions	Min.	Typ.	Max.	Units	
MTBF	MIL HDBK 217F, 25°C, Gnd Benign	300			kHours	
Safety Standards	EN 60950					
Safety Class	IEC 60536 Class II					
ECO Design	ErP Directive 2009/125/EC					

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



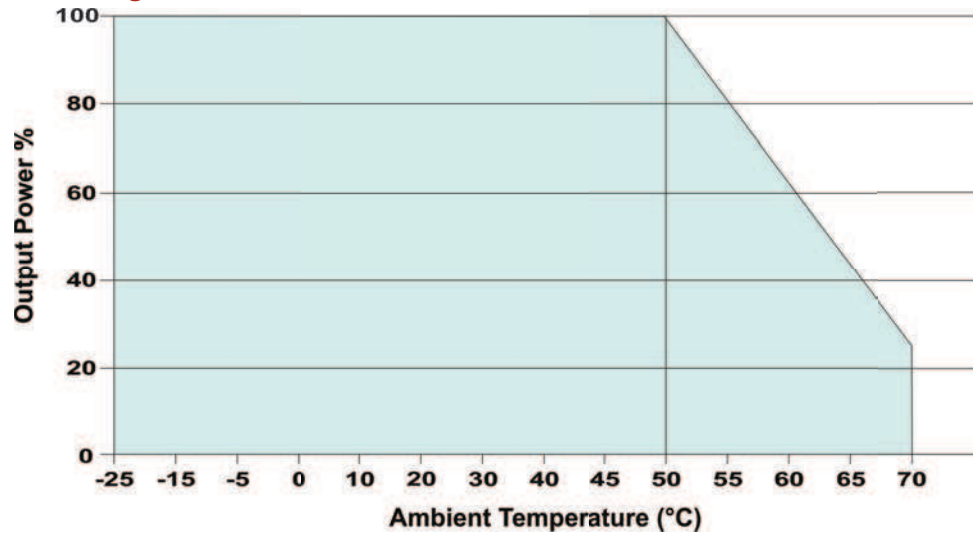
www.micropowerdirect.com

Model Number	Input		Voltage (VDC)	Output		Maximum Capacitive Load (μF)	Maximum Output Power (W)	Efficiency (% Typ)
	Current (A)			Current				
	115 VAC	230 VAC	Max. (A)	Min. (%)				
MPM-10S-03PB	0.171	0.128	3.3	2.500	10.0	2,200	8.25	70
MPM-10S-05PB	0.201	0.151	5.0	2.000	10.0	2,200	10.00	72
MPM-10S-12PB	0.191	0.143	12.0	0.833	10.0	1,000	10.00	76
MPM-10S-15PB	0.193	0.145	15.0	0.667	10.0	1,000	10.00	75
MPM-10S-24PB	0.201	0.151	24.0	0.417	10.0	680	10.00	72

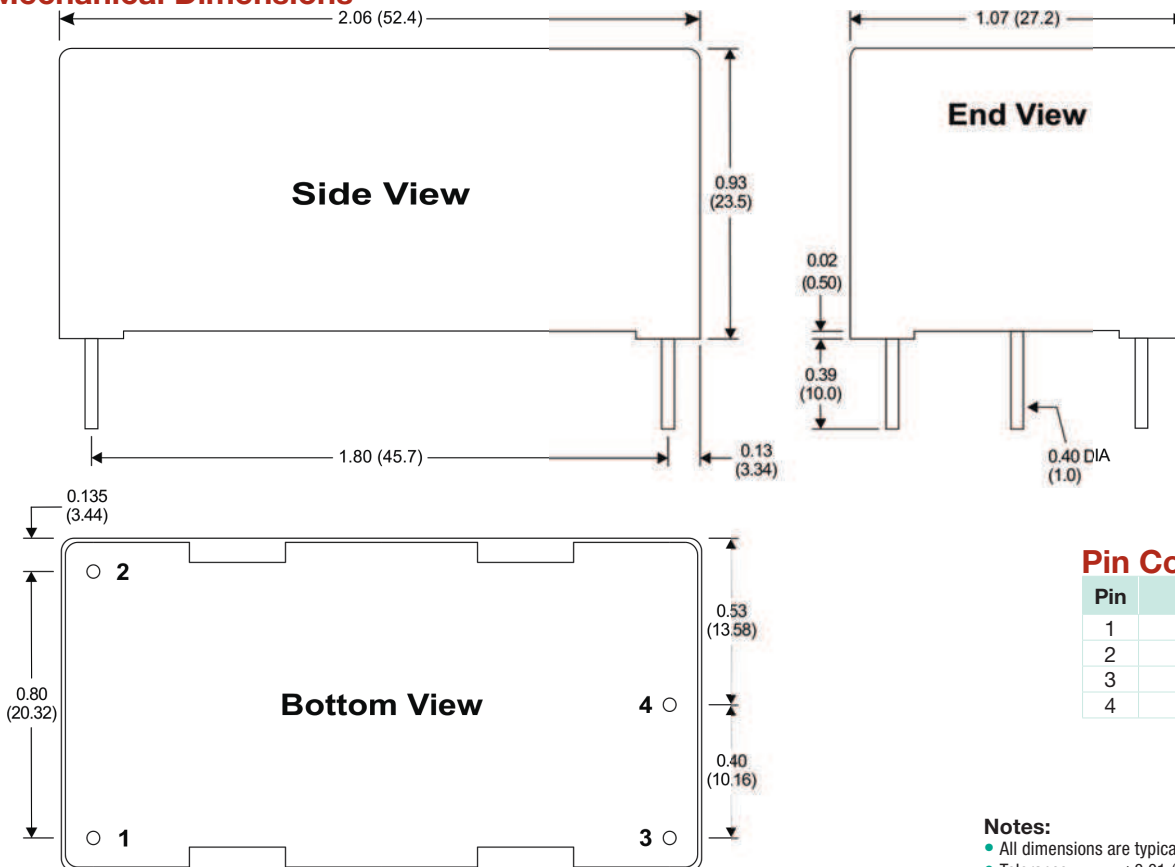
Notes:

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. Operation at under no load conditions will not damage these units.
4. It is recommended that a fuse be used on the input of a power supply for protection. For the **MPM-10PB** series, a 1.5A/250 VAC slow blow should be used.

Derating Curve



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 = ±0.01 (±0.25)



MicroPower Direct

We Power Your Success - For Less!