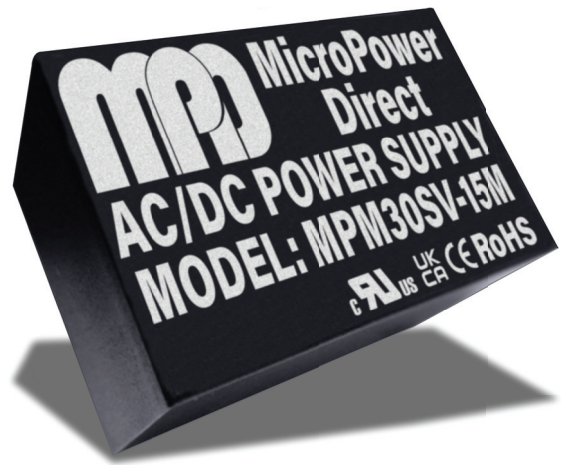


MPM-30SVM

Compact, Encapsulated, PC Board Mount, 30W AC/DC Power Supplies



Key Features:

- 30W Output Power
- Universal 90-305 VAC Input
- Very Compact Size
- EN 62368 Approved (UL)
- High Efficiency
- -40°C to +85°C Temp Range
- Meets EN 55032 B
- >400 kHour MTBF
- 4,000 VAC Isolation

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		90		305	VAC		
		120		430	VDC		
Input Frequency		47		440	Hz		
Input Current	See Model Selection Guide						
Inrush Current	115 VAC			30.0	A Pk		
	230 VAC			60.0			
Leakage Current	230 VAC			0.25	mA		
Output							
Parameter	Conditions	Min.	Typ.	Max.	Units		
Output Voltage Accuracy			±2.0		%		
Line Regulation	V _{IN} = Min to Max		±1.0		%		
Load Regulation, 0 to 100%	5V Output		±3.0		%		
	All Other Outputs		±2.0		%		
Ripple/Noise, See Note 1	5V Output		120		mVp-p		
	12 & 15V Output		150				
	24V Output		240				
Hold-Up Time	230 VAC		36		mSec		
Temperature Coefficient			±0.02		%/°C		
Over Voltage Protection	Zener Diode Clamp						
Over Power Protection	Hiccup Mode (Autorecovery)						
Short Circuit Protection, See Note 2	Continuous (Autorecovery)						
General							
Parameter	Conditions	Min.	Typ.	Max.	Units		
Isolation Voltage	Input to Output	4,000			VAC		
EMC	EMI (Conducted/Radiated Emmissions)					EN 55032 Level B	
	EMS (Noise Immunity)					EN 55035	
Environmental							
Parameter	Conditions	Min.	Typ.	Max.	Units		
Operating Temperature Range	Ambient	-40	+25	+85	°C		
Storage Temperature Range		-40		+85	°C		
Cooling	Free Air Convection (See Derating Curve)						
Altitude			5,000		m		
Humidity	RH, Non-condensing			95	%		
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	400			kHours		
Safety Standards	UL/cUL 62368-1 recognition (UL certificate)						
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						



MicroPower Direct

46 Eastman Street
Unit 1
Easton, MA 02375
USA

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



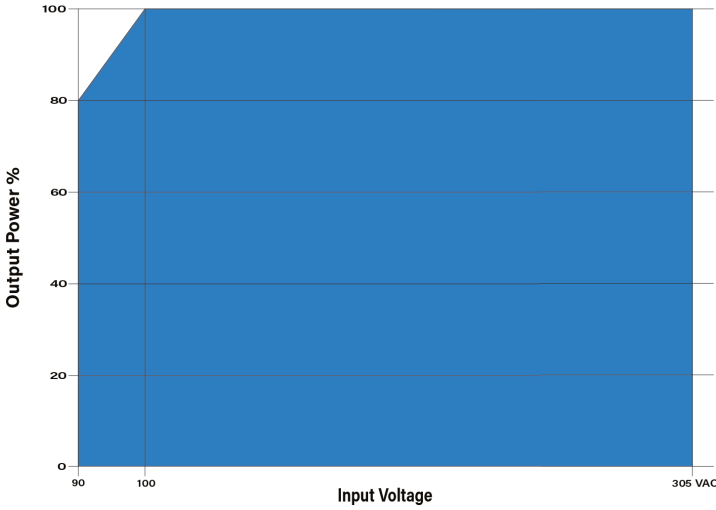
www.micropowerdirect.com

Model Selection Guide

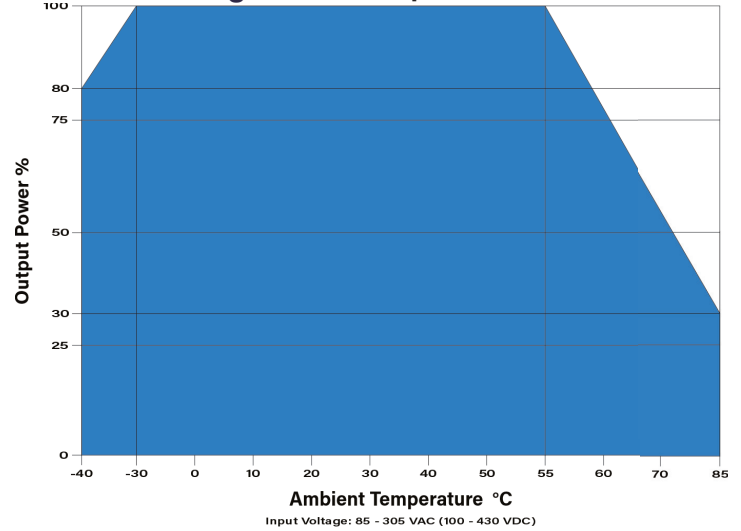
Model Number	Input		Output			Capacitive Load (μ F, Max)	Efficiency (230 VAC, %, Typ)	Fuse Rating Slow-Blow (See Note 3)
	Current (mA Max)		Voltage (VDC)	Current (mA Max)	Power (W)			
	115 VAC	230 VAC						
MPM-30SV-05M	600.0	400.0	5.10	4,600	23.4	6,800	84	2.0A/300V
MPM-30SV-12M	600.0	400.0	12.0	2,500	30.0	1,600	88	2.0A/300V
MPM-30SV-15M	600.0	400.0	15.0	2,000	30.0	1,200	87	2.0A/300V
MPM-30SV-24M	600.0	400.0	24.0	1,250	30.0	470	86	2.0A/300V

- Notes:
- Ripple and noise are measured at 20 Mhz bandwidth with a 0.1μ F and a 47μ F 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.
 - When connecting the fuse to the input of the supply, care must be taken to ensure the fuse is at least 3.2mm away from the input connections.

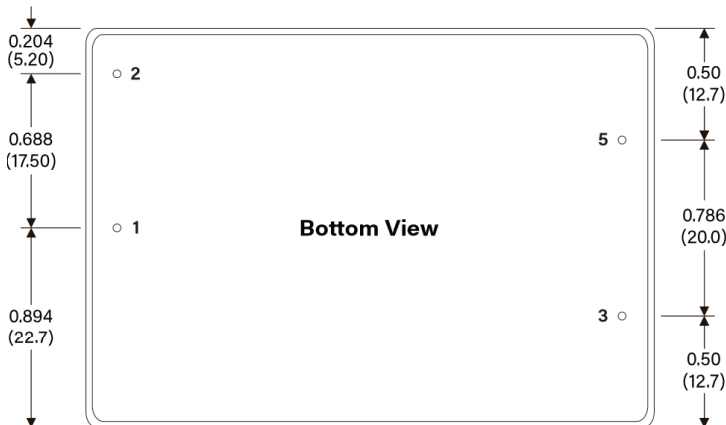
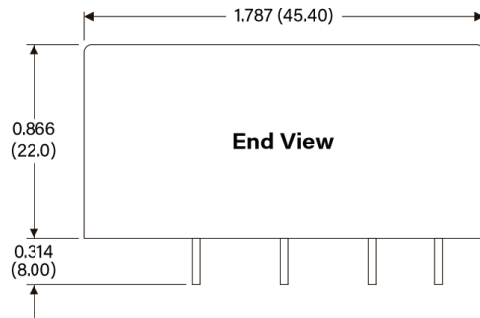
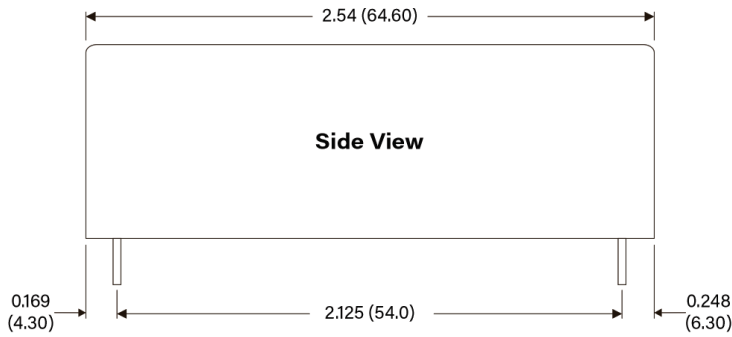
Power Derating Curve, Input Voltage



Power Derating Curve, Temperature



Mechanical Dimensions



Pin Connections

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

Notes:

- All dimensions are typical in inches (mm)
- Tolerance x.xx = ± 0.02 (± 0.50)
- Module Weight is: 3.74 Oz (106g)