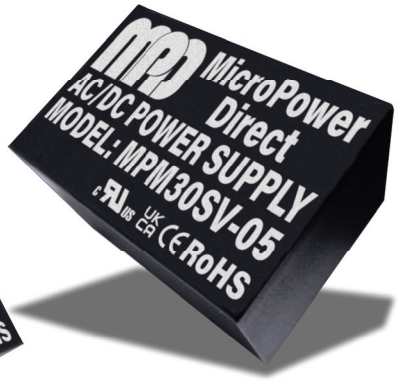
MPM-30SV

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	VIN = 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 Emmisions)				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
MICROPOWER DIRECT

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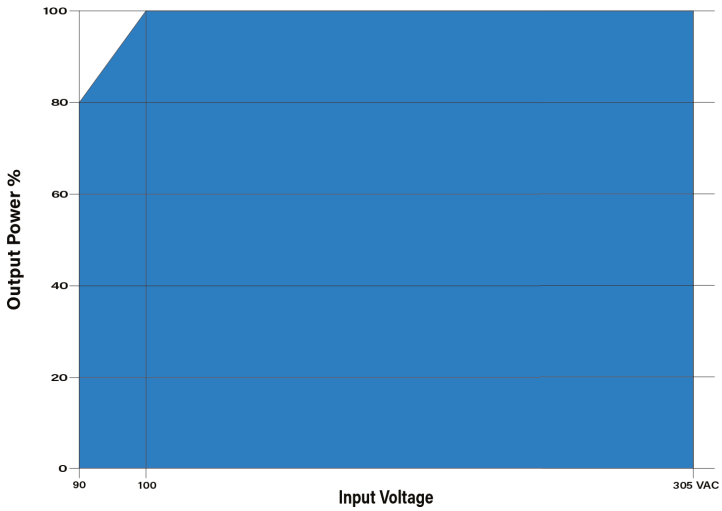
CompuMess Elektronik
Power mit System

Model Selection Guide

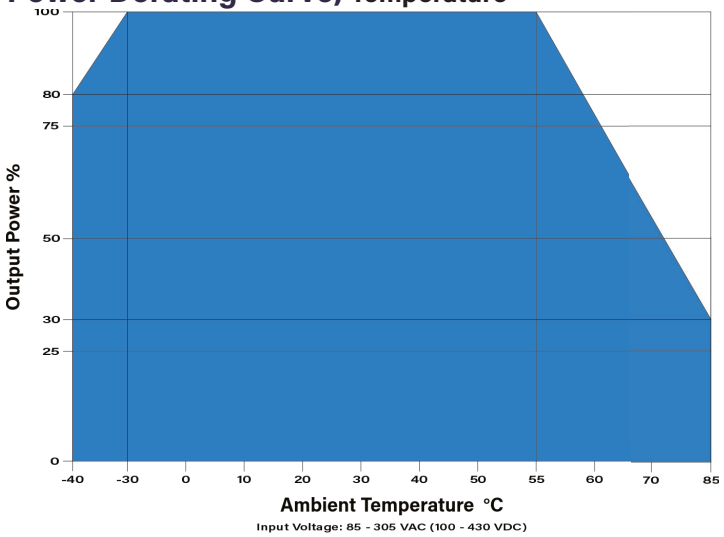
Model Number	Input		Output			Capacitive Load (μF, Max)	Efficiency (230 VAC, %, Typ)	Fuse Rating Slow-Blow (See Note 3)
	Current (mA Max)		Voltage (VDC)	Current (mA Max)	Power (W)			
	115 VAC	230 VAC						
MPM-30SV-05	600.0	400.0	5.10	4,600	23.4	6,800	84	2.0A/300V
MPM-30SV-12	600.0	400.0	12.0	2,500	30.0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

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. 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.

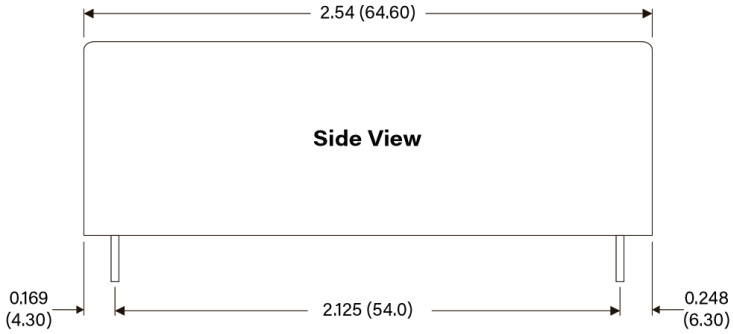
Power Derating Curve, Input Voltage

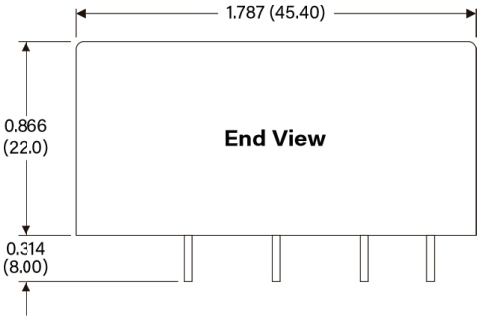


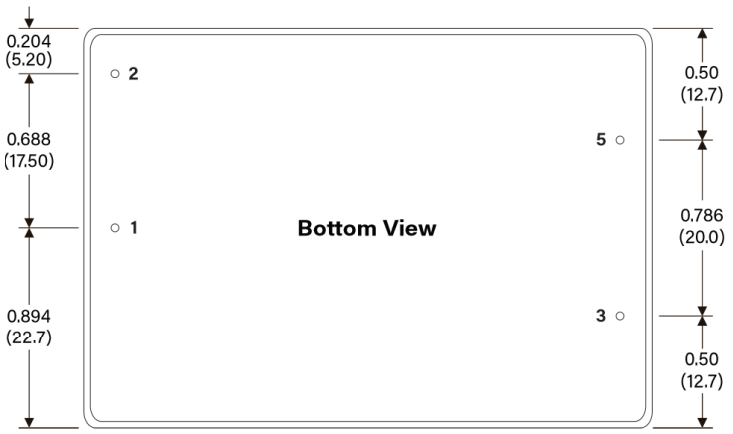
Power Derating Curve, Temperature



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)

MPD MicroPower Direct

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