

### Features:

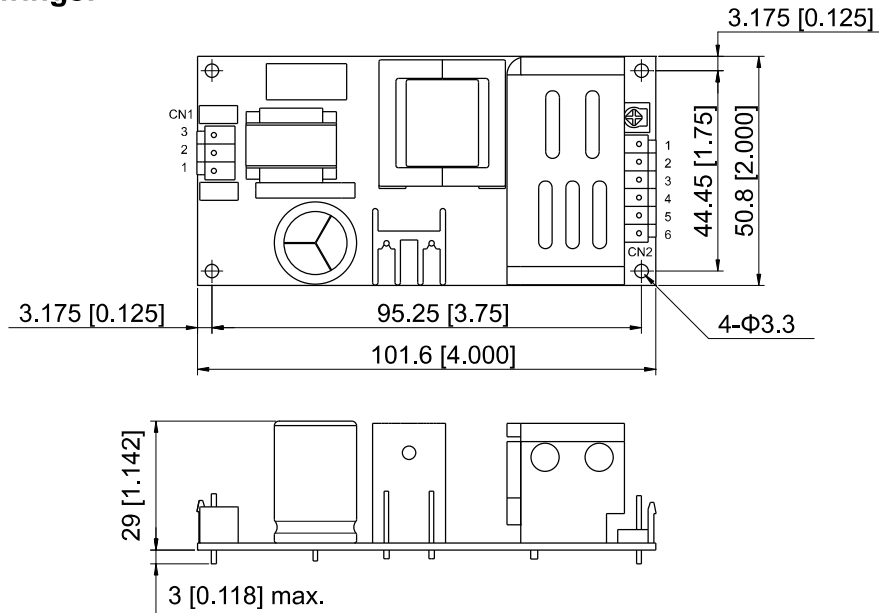
- Universal AC input / Full range
- Medical safety approval: ANSI / AAMI ES 60601-1 / TUV EN 60601-1: 2006; IEC 60601-1 / 2xMOPP
- Protection: Short circuit, Over load, Over voltage  
Brown-out (Low AC Input Voltage)
- High operation temperature up to 70°C
- Withstand 2G vibration test
- 3 years warranty



Model		MP45-05F		MP45-05K	
Output	Output Number	CH1	CH2	CH1	CH2
	DC Voltage Range	5V	12V	5V	24V
	Rated Current	4.2A	1.6A	3.5A	1.1A
	Current Range	0.5 ~ 4.7A	0.1 ~ 1.76A	0.5 ~ 3.85A	0.1 ~ 1.21A
	Rated Power	40.2W		43.9W	
	Peak Load (10sec.)	44.62W		48.29W	
	Ripple & Noise (Max.)	80mVp-p	80mVp-p	80mVp-p	100mVp-p
	Voltage Tolerance	+3 / -2%	±6.0%	+3 / -2%	+8 / -4%
	Line Regulation	±0.5%	±1.0%	±0.5%	±1.0%
	Load Regulation	±1.5%	±2.0%	±1.5%	±2.0%
Setup,Rise Time	200ms,15ms / 230VAC, 200ms,15ms / 115VAC at full load				
Hold Up Time	70ms / 230VAC, 14ms / 115VAC at full load				
Input	Voltage Range	90 ~ 264VAC, 127 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)			
	Frequency Range	47 ~ 63Hz			
	Efficiency (Typ.) at 230VAC	80%		82%	
	AC Current (Typ.)	1.3A / 115VAC, 0.7A / 230VAC			
	Inrush Current (Typ.)	Cold Start 30A / 115VAC, 60A / 230VAC			
Leakage Current	For earth < 200uA/264VAC, For patient < 100uA / 264VAC				
Protection	Over Load	Above 110% rated output power Protection type: Hiccup mode, recovers automatically after fault condition is removed			
	Over Voltage	115 ~ 140% rated output voltage Protection type: latch-off mode			
Environment	Working Temp.	-20 ~ 70°C (Refer to de-rating curve)			
	Working Humidity	20 ~ 90% RH non-condensing			
	Storage Temp. & Humidity	-40 ~ +85°C, 10 ~ 95% RH			
	Temp. Coefficient	±0.03% / °C (0 ~ 50°C)			
Vibration	10 ~ 500Hz, 2G 10min. / 1cycle, period for 60min. each along X, Y, Z axes				
Safety & EMC	Safety Standards	Certified UL / cUL (ANSI / AAMI ES 60601-1; CAN / CSA-C22.2 No.60601-1); NFPA 99 Certified TUV (EN 60601-1; IEC 60601-1); MOPP approval			
	Withstand Voltage	I/P-O/P: 4KVAC, I/P-FG: 1.8KVAC, O/P-FG: 1.5KVAC			
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC			
	EMI Conduction & Radiation	Certified EN 55011 Class B			
	Harmonic Current	Certified EN 61000-3-2; EN 61000-3-3			
EMS Immunity	Certified EN 60601-1-2; IEC 61000-4-2, 3, 4, 5, 6, 8, 11				
Others	MTBF	215.48K HRS Certified MIL-HDBK-217F			
	Dimension (WxHxD)	50.8x29.0x101.6 mm / 2.000x1.142x4.000 inch			
	Packing	0.151kg; 80pcs / 13.08kg / 1.43CUFT			
Note	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. 3. Tolerance: includes setup time tolerance, line regulation and load regulation. 4. Line regulation is measured from low line to high line at rated load. 5. Load regulation is measured from 0% to 100% rated load. 6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 7. Length of setup time is measured at first cold start. Turning ON/OFF the power supply continuously may increase the setup time. 8. Max. 33% duty cycle within every 30 sec. Average output power should not exceed the rated power.				

### Mechanical Drawings:

Unit : mm[inch]



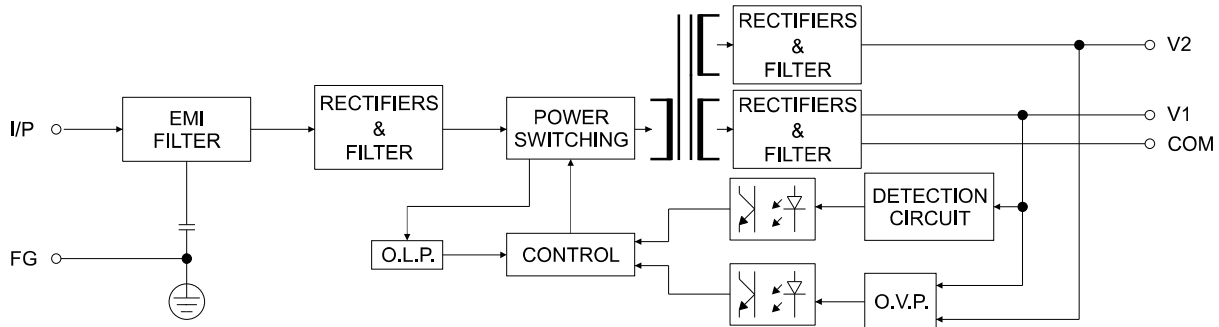
AC Input Connector (CN1) : JST B3P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC / N	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC / L		

DC Output Connector (CN2) : JST B4P-VH or equivalent

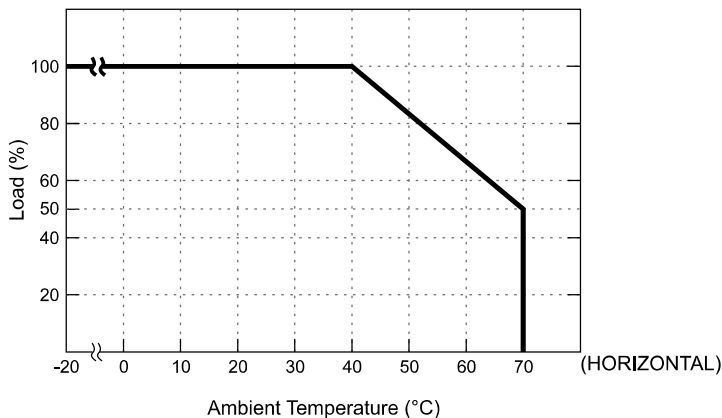
Pin No.	Assignment	Mating Housing	Terminal
1,2	V1	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
3,4	COM		
5	V2		
6	NC		

### Block Diagram:



### De-rating Curve:

Load V.S Temp.



Load V.S I/P Voltage

