

### Features :

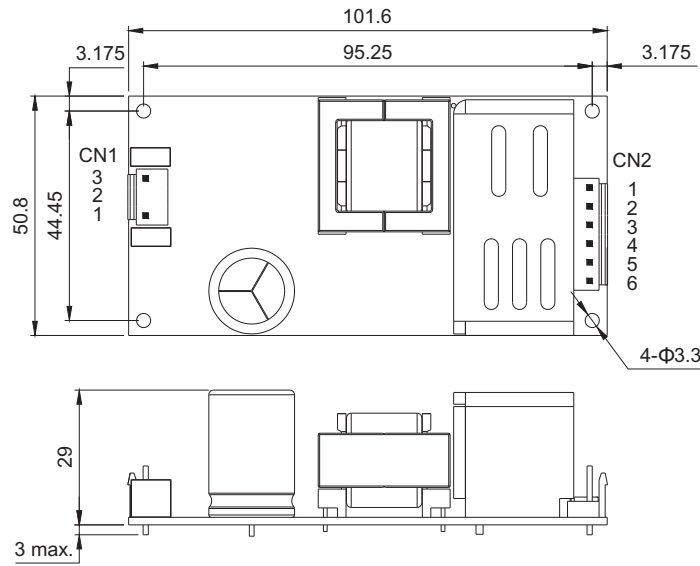
- 4"x2" miniature size
- Universal AC input / Full range
- Protections: Short circuit / Over load / Over voltage  
Brown-out ( Low AC Input voltage )
- Cooling by free air convection
- UL60601-1/IEC60601-1/EN60601-1: 2006 medical safety approved
- All using 105°C long life electrolytic capacitors
- High operation temperature up to 70°C
- 100% full load burn-in test
- Withstand 2G vibration test
- High efficiency, long life and high reliability
- 3 years warranty



Model		MP60-05F		MP60-05K	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2
	DC Voltage Range	5V	12V	5V	24V
	Rated Current	5A	2A	3.5A	1.5A
	Current Range	0.5~5.5A	0.1~2.2A	0.5~3.85A	0.1~1.65A
	Rated Power	49W		53.5W	
	PEAK LOAD(10sec.)	53.9W		58.85W	
	Ripple & Noise(max.)	80mV	80mV	80mV	100mV
	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	90V~264VAC 127 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)			
	Frequency Range	47Hz ~ 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°C ~ 70°C (Refer to output load de-rating curve)			
	Working Humidity	20 ~ 90% RH non-condensing			
	Storage Temp., Humidity	-40 ~ +85°C, 10 ~95% R.H			
	Temp.Coefficient	±0.03%/°C (0 ~ 50°C)			
Safety & EMC	Vibration	10 ~ 500Hz, 2G 10min/1cycle, period for 60 min each along X,Y,Z axes			
	Safety Standards	UL60601-1 / TUV EN60601-1: 2006 / IEC60601-1 Approved			
	Withstand Voltage	I/P-O/P:4KVAC I/P-FG:1.5KVAC O/P-FG:1.5KVAC			
	Isolation Resistance	I/P - O/P : 100M Ohms / 500VDC			
	EMI Conduction & Radiation	EN55011 : 2007+A2 : 2007 Class B			
	Harmonic Current	EN61000-3-2 : 2006 Class A, EN61000-3-3 : 1995+A1 :2001+A2 : 2005			
Others	EMS Immunity	EN60601-1-2:2001+A1:2006, IEC61000-4-2,3,4,5,6,8,11			
	MTBF	215.48 K Hours			
	Dimension	101.6x50.8x29 mm			
Note	Packing	0.151kg ; 80Pcs / 13.56kg			
	Note	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>4. Line regulation is measured from low line to high line at rated load.</li> <li>5. Load regulation is measured from 0% to 100% rated load.</li> <li>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.</li> <li>7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time</li> <li>8.33% Duty cycle maximum within every 30 seconds.Average output power should not exceed the rated power.</li> </ol>			

### Mechanical Specification

Unit : mm



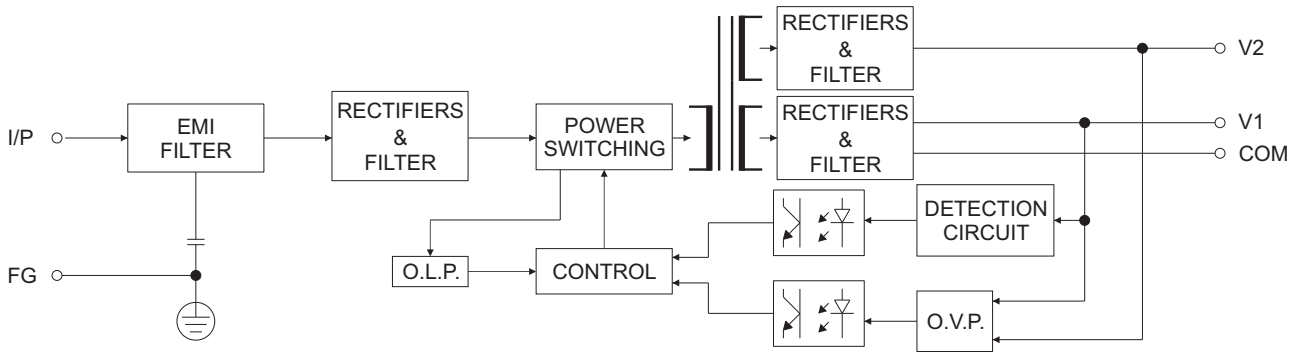
AC Input Connector (CN1) : JST B3P-VH or equivalent

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

