



- Features :
  - Universal AC input / Full range
  - Built-in active PFC function
  - Protections: Short circuit / Overload / Over voltage / Over temperature
  - 5"x3" compact size
  - Free air convection for 100W and 150W with 20.5 CFM forced air
  - Medical safety approved (2 x MOPP between primary to secondary)
  - With power good and fail signal output
  - No load power consumption under 0.75W with PS-ON control (G model)
  - Standby 5V@0.8A with fan, @0.6A without fan (G model)
  - Suitable for BF application with appropriate system consideration
  - 3 years warranty

RPD **G** - 160B

**G: With 5Vsb & no load power consumption < 0.75 W**

**Blank: Basic function (without 5Vsb)**

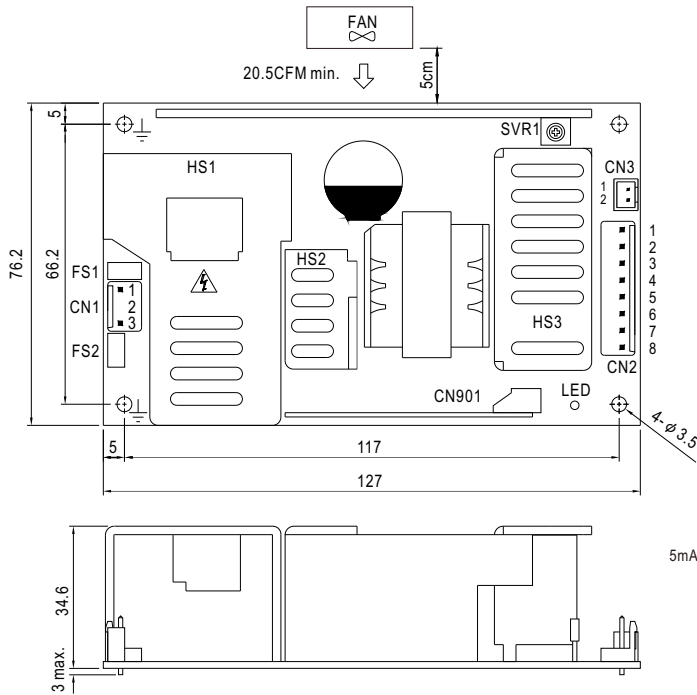


**SPECIFICATION**

MODEL		RPD-160B		
OUTPUT	OUTPUT NUMBER	CH1	CH2	
	DC VOLTAGE	5V	24V	
	RATED CURRENT (20.5CFM)	12A	3.6A	
	CURRENT RANGE (convection)	1 ~ 6A	0.2 ~ 2.8A	
	CURRENT RANGE (20.5CFM)	1 ~ 12A	0.2 ~ 3.6A	
	RATED POWER (convection) Note.7	100.2W		
	RATED POWER (20.5CFM) Note.8	150.4W		
	RIPPLE & NOISE (max.) Note.2	80mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	CH1: 5 ~ 5.5V		
	VOLTAGE TOLERANCE Note.3	± 2.5%	± 6.0%	
	LINE REGULATION	± 0.5%	± 1.0%	
	LOAD REGULATION	± 1.5%	± 3.0%	
SETUP, RISE TIME	1800ms, 30ms/230VAC	3500ms, 30ms/115VAC at full load		
HOLD UP TIME (Typ.)	16ms/230VAC/115VAC at full load			
INPUT	VOLTAGE RANGE Note.6	90 ~ 264VAC	127 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF>0.93/230VAC	PF>0.98/115VAC at full load	
	EFFICIENCY (Typ.)	84%		
	AC CURRENT (Typ.)	1.7A/115VAC	0.9A/230VAC	
	INRUSH CURRENT (Typ.)	COLD START 35A/115VAC 70A/230VAC		
LEAKAGE CURRENT Note.9	Earth leakage current < 200µA/264VAC , Touch current < 100µA/264VAC			
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	CH1: 5.75 ~ 6.75V Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	105°C (TSW1) detect on heatsink of power transistor 90°C (TSW2 ) detect on heatsink of power transistor Protection type : (TSW1) Shut down o/p voltage, recovers automatically after temperature goes down Protection type : (TSW2) Shut down o/p voltage, re-power on to recover		
FUNCTION	5V STANDBY (G model)	5VSB : 5V@0.6A without fan, 0.8A with fan 20.5CFM ; tolerance ± 2%, ripple : 50mVp-p(max.)		
	PS-ON INPUT SIGNAL (G model)	Power on: PS-ON = "Hi" or " > 2 ~ 5V" ; Power off: PS-ON = "Low" or " < 0 ~ 0.5V"		
	POWER GOOD / POWER FAIL	500ms>PG>10ms	PF>1ms	
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°C (Refer to "Derating 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, 60min. each along X, Y, Z axes		
SAFETY & EMC (Note 4)	SAFETY STANDARDS	ANSI/AAMI ES60601-1, TUV EN60601-1 approved		
	ISOLATION LEVEL	Primary-Secondary: 2xMOPP, Primary-Earth:1xMOPP, Secondary-Earth:1xMOPP		
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC	I/P-FG:2KVAC	O/P-FG:1.5KVAC
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH		
	EMC EMISSION	Compliance to EN55011 (CISPR11), EN55022 (CISPR22) Class B, EN61000-3-2,-3		
EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, EN61204-3, medical level, criteria A			
OTHERS	MTBF	196.3K hrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	127*76.2*34.6mm (L*W*H)		
	PACKING	0.33Kg; 36pcs/12.9Kg/0.79CUFT		
NOTE	<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> <li>HS1,HS2 &amp; HS3 can not be shorted.</li> <li>Derating may be needed under low input voltages. Please check the derating curve for more details.</li> <li>The rated power includes 5Vsb @ 0.6A.</li> <li>The rated power includes 5Vsb @ 0.8A.</li> <li>Touch current was measured from primary input to DC output.</li> </ol>			

**Mechanical Specification**

Unit:mm



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

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

DC Output Connector (CN2) : JST B8P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2,3,4	COM	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
5,6	CH1		
7	CH2		
8	NC		

Power Good Connector(CN3):JST B2B-XH or equivalent

Pin No.	Status	Mating Housing	Terminal
1	PG	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	GND		

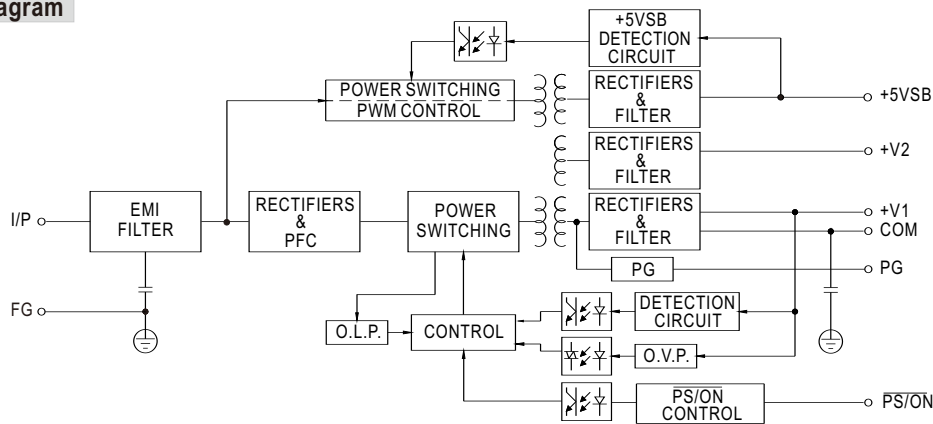
5VSB Connector(CN901) : JST B-XH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	PS/ON	JST XHP or equivalent	JST SXH-001T or equivalent
2,4	GND		
3	5VSB		

⚠ HS1,HS2,HS3 can not be shorted

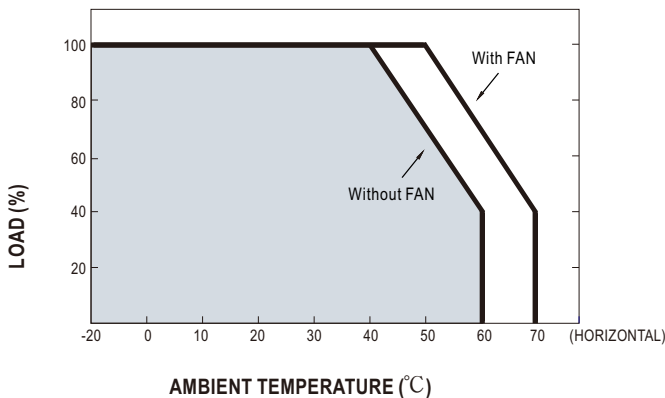
⊕ : Grounding required

**Block Diagram**



fosc :100KHz

**Derating Curve**



**Output Derating VS Input Voltage**

