



## 10W Output Switching Power Supply

## PM-10 series



## ■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Ultra-miniature size, light weight
- Cooling by free air convection
- Isolation class II
- UL60601-1/IEC60601-1/EN60601-1 medical safety approved
- No load power consumption < 0.5W
- 100% full load burn-in test
- Fixed switching frequency at 67KHz
- High reliability
- 3 years warranty



## SPECIFICATION

MODEL	PM-10-3.3	PM-10-5	PM-10-12	PM-10-15	PM-10-24	
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	24V
	RATED CURRENT	2.5A	2A	0.85A	0.67A	0.42A
	CURRENT RANGE	0 ~ 2.5A	0 ~ 2A	0 ~ 0.85A	0 ~ 0.67A	0 ~ 0.42A
	RATED POWER	8.25W	10W	10.2W	10.05W	10.08W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	150mVp-p	150mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.3	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±0.5%
	SETUP, RISE TIME	1000ms, 20ms/230VAC 1000ms, 20ms/115VAC at full load				
HOLD UP TIME (Typ.)	100ms/230VAC 24ms/115VAC at full load					
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 440Hz				
	EFFICIENCY (Typ.)	66%	74%	78%	79%	79%
	AC CURRENT (Typ.)	0.25A/115VAC 0.15A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 25A/115VAC 45A/230VAC				
PROTECTION	OVERLOAD	Above 105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	3.8 ~ 4.95V	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°C (Refer to output load 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, Period for 60min.each along X, Y, Z axes				
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60601-1, TUV EN60601-1 Approved				
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms/500VDC				
	EMI CONDUCTION & RADIATION	Compliance to EN55011(CISPR11), EN55022 (CISPR22) Class B				
	HARMONIC CURRENT	Compliance to EN61000-3-2, -3				
OTHERS	EMT IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN55024, EN60601-1-2, EN61204-3 Medical level, criteria A				
	MTBF	723.2Khrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	70*50*22.7mm (L*W*H)				
NOTE	PACKING	0.105Kg; 120pcs/13.6Kg/0.97CUFT				
		<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. 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> </ol>				

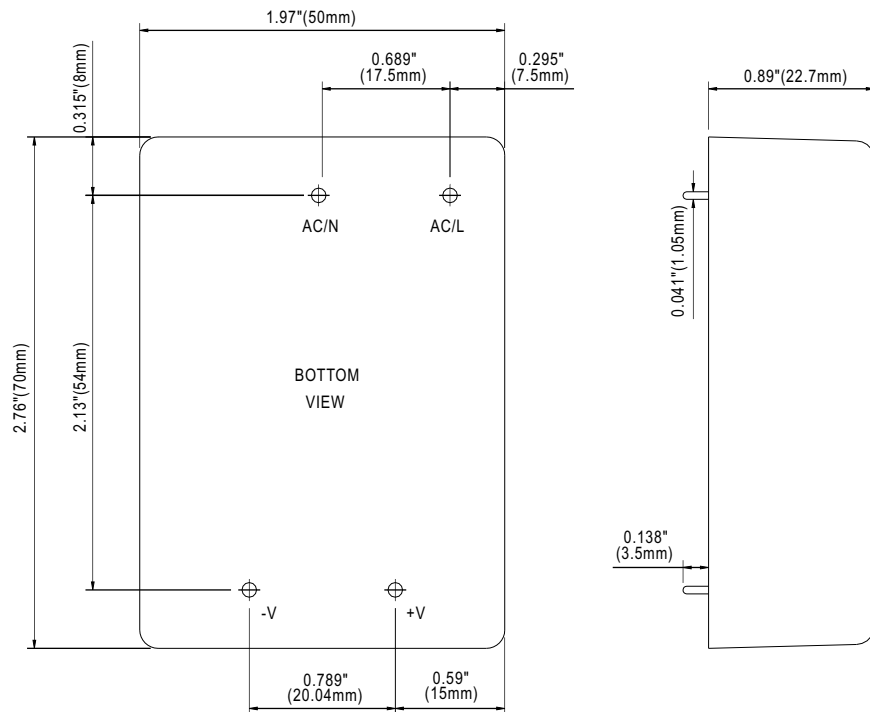


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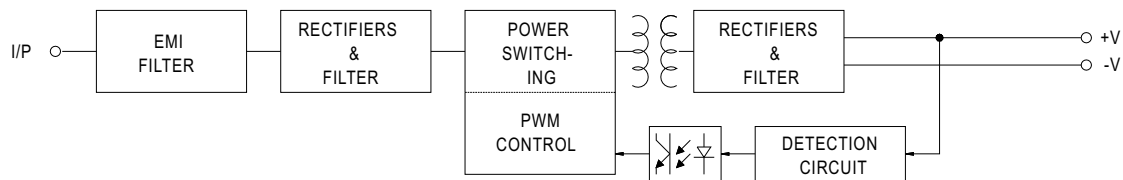
■ Mechanical Specification

Case No. 949A Unit:inch(mm)

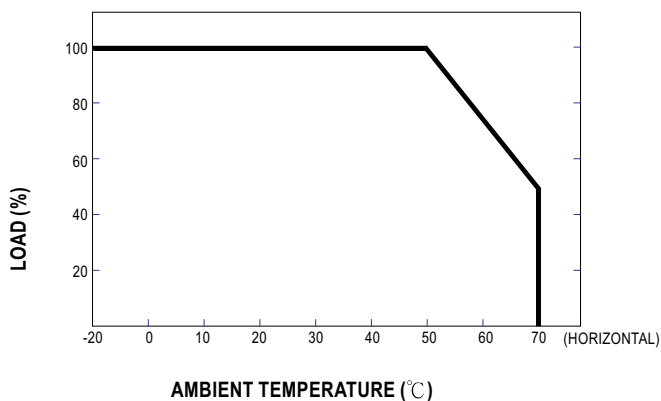


■ Block Diagram

fosc : 67KHz



■ Derating Curve



■ Output Derating VS Input Voltage

