

IRM-03 Series

3W Single Output Encapsulated Power Supply



Case No: 8914ET ~ SMD style: 37 x 24 x 16mm
Case N0: 8917HJ ~ PCB mounting style: 37 x 24 x 15mm

Features

- Universal AC input / Full range
- Compact size
- Protections: Short circuit / Overload / Over Voltage
- Cooling by free air convection
- Isolation class II
- No load power consumption <0.075W
- Comply with EN55022 Class B without any additional components
- High reliability, low cost
- 3 years warranty



Specification

INPUT	Voltage	85 ~ 305V 120 ~ 430VDC					
	Frequency	47 ~ 63Hz					
	AC Current	70mA/115VAC	40mA/230VAC	35mA/277VAC			
	Inrush Current	10A/115VAC 20A/230VAC					
	Leakage Current	<0.25mA/277VAC					
	Efficiency	68%	72%	77%	78%	78%	80%
	OUTPUT	MODEL No.	IRM-03-3.3	IRM-03-5	IRM-03-9	IRM-03-12	IRM-03-15
DC Voltage		3.3V	5V	9V	12V	15V	24V
Rated Current		900mA	600mA	333mA	250mA	200mA	125mA
Current Range		0 ~ 900mA	0 ~ 600mA	0 ~ 333mA	0 ~ 250mA	0 ~ 200mA	0 ~ 125mA
Rated Power		3W	3W	3W	3W	3W	3W
R & N (max)		100mVp-p	100mVp-p	100mVp-p	150mVp-p	200mVp-p	240mVp-p
Voltage Tolerance		±2.5%	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%
Line Regulation		±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Load Regulation		±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Setup, Rise Time		600ms, 30ms/230VAC 600ms, 30ms/115VAC at full load					
Hold Up Time		40ms/230VAC 8ms/115VAC at full load					
PROTECTION	Overload	≥105% ~ 260% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed					
	Over Voltage	3.8~4.9V	5.2~6.8V	10.3~12.2V	12.6~16.2V	15.75~20.30V	25.2~32.4V
		Protection Type: Shut off o/p voltage, clamping by zener diode					
ENVIRONMENT	Working Temperature	-30 ~ +85°C (Refer to "Derating Curve")					
	Working Humidity	20 ~ 90% RH non-condensing					
	Storage Temp.	-40°C to +100°C, 10~95% RH					
	Temp. Coefficient	±0.03%/°C (0~50°C)					
	Vibration	10 ~ 500Hz, 5G 10min./1 cycle, period for 60 min. each long X, Y, Z axes					
SAFETY & EMC	Safety Standards	UL60950-1, TUV EN60950-1 approved, Optional IEC60601-1, EN60335-1, EN61558-1/-2-16					
	Withstand Voltage	I/P-O/P:3KVAC					
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH					
	EMC Emission	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3					
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level (surge L-N:1KV), criteria A					
OTHERS	MTBF	2137.6Khrs min. MIL-HDBK-217 (25°C)					
	Packaging	PCB mounting style 0.02Kg: 560pcs/12.8Kg/0.96CUFT SMD style: 0.029Kg: 560pcs/12.8Kg/0.96CUFT					

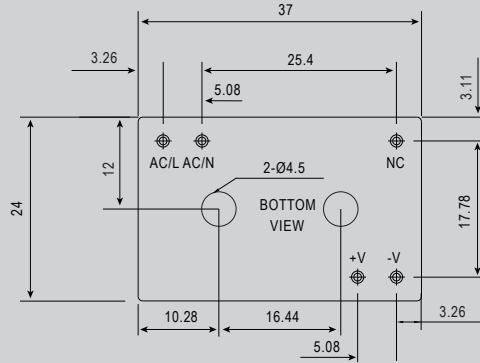
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.

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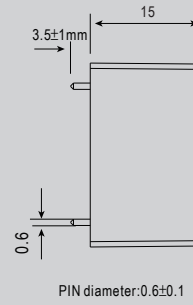
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Mechanical Specification

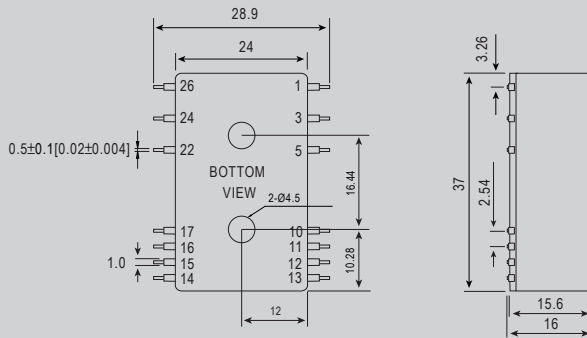
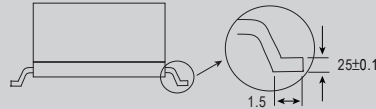
• PCB mounting style



Case No. IRM03 Unit:mm[inch]
Tolerance:±0.5
unless otherwise specified

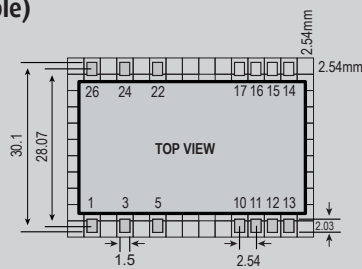


• SMD style



Pin NO.	Assignment
1	AC/L
3	AC/N
14	-Vo
16	+Vo
others	NC

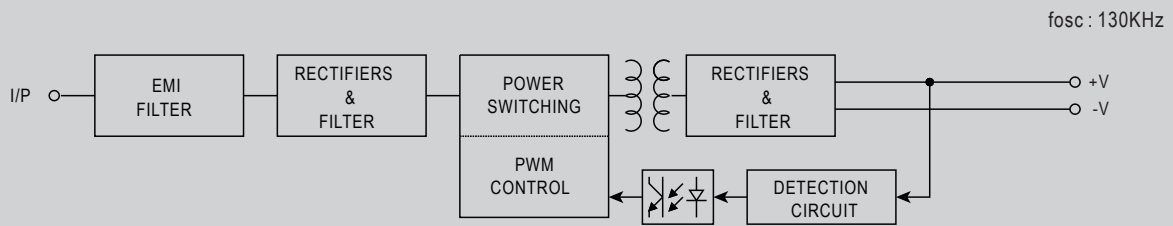
Recommended PCB layout (for SMD style) (Reflow soldering method available)



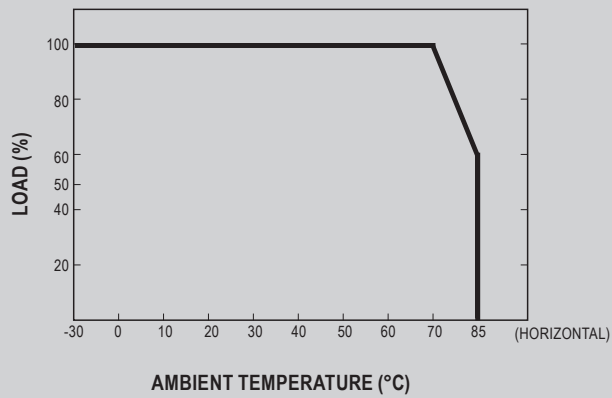
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Block Diagram



Derating Curve



Static Characteristics

