



# 10W Single Output Encapsulated Type

# IRM-10 series



### ■ 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 < 0.1W
- 100% full load burn-in test
- High reliability
- 3 years warranty

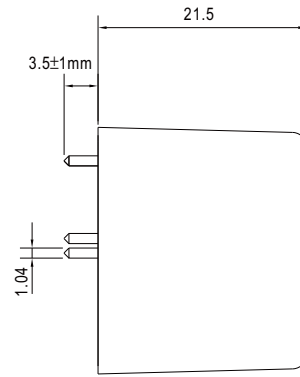
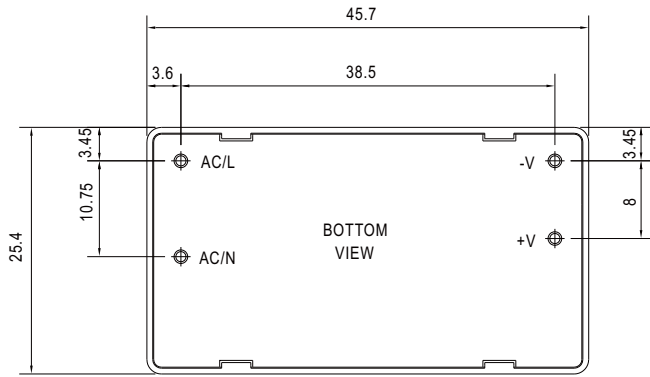


### SPECIFICATION

MODEL	IRM-10-3.3	IRM-10-5	IRM-10-12	IRM-10-15	IRM-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	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%
	LINE REGULATION	±0.3%	±0.3%	±0.3%	±0.3%	±0.3%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME Note.4	600ms, 30ms at full load				
HOLD UP TIME (Typ.)	30ms/230VAC 8ms/115VAC at full load					
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 440Hz				
	EFFICIENCY (Typ.)	74%	77%	82%	82%	82%
	AC CURRENT (Typ.)	0.25A/115VAC 0.15A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC 40A/230VAC				
	LEAKAGE CURRENT	< 0.25mA/240VAC				
PROTECTION	OVERLOAD	115%~190% 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.	-30 ~ +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, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, EAC TP TC 004 approved				
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH				
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020				
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level (surge L-N:1KV), criteria A, EAC TP TC 020				
	MTBF	1495.8Khrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	45.7*25.4*21.5mm (L*W*H)				
NOTE	PACKING	0.033Kg; 270pcs/9.8Kg/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. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.</li> <li>5. 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>6. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</li> </ol>				

■ Mechanical Specification

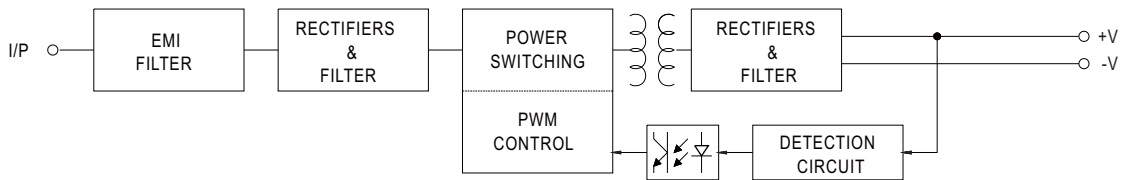
Case No.222A Unit:(mm)



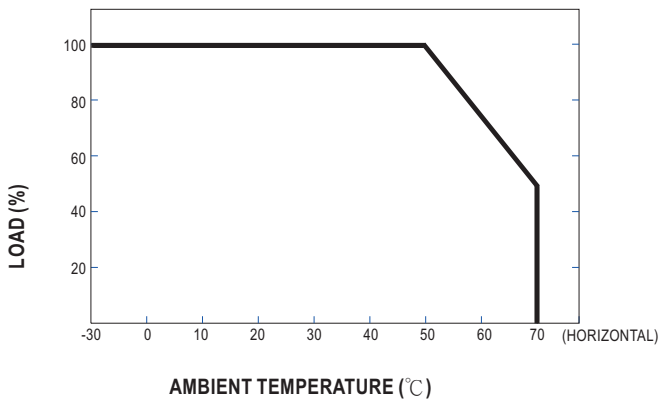
P/N diameter:1.04

■ Block Diagram

fosc: 100KHz



■ Derating Curve



■ Output Derating VS Input Voltage

