

### ■ Features:

- Universal AC input / Full range
- Compact size
- Protections: Short circuit / Over load / Over voltage
- Cooling by free air convection
- Isolation class II
- No load power consumption < 0.1W
- Pass LPS (Except for 5V)
- 100% full load burn-in test
- High reliability
- 3 years warranty

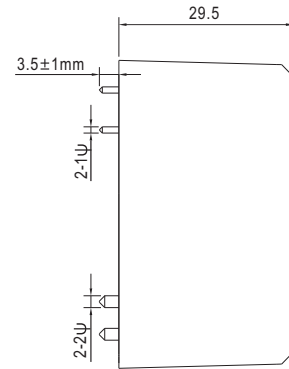
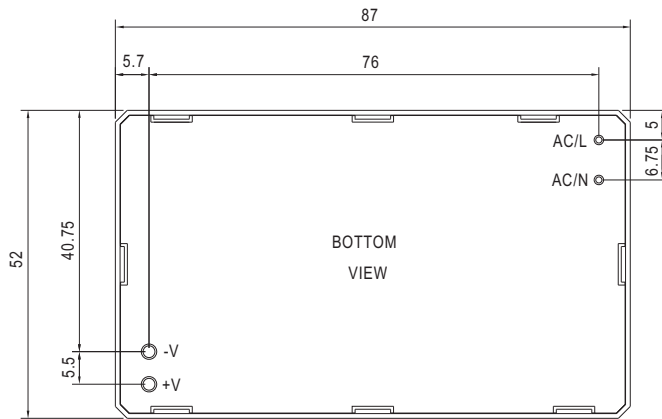


### SPECIFICATION

MODEL	IRM-60-5	IRM-60-12	IRM-60-15	IRM-60-24	IRM-60-48	
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	48V
	RATED CURRENT	10A	5A	4A	2.5A	1.25A
	CURRENT RANGE	0 ~ 10A	0 ~ 5A	0 ~ 4A	0 ~ 2.5A	0 ~ 1.25A
	RATED POWER	50W	60W	60W	60W	60W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	150mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.5%	±2.5%	±2.5%	±2.5%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1000ms, 30ms/230VAC      2000ms, 30ms/115VAC at full load				
HOLD UP TIME (Typ.)	50ms/230VAC      12ms/115VAC at full load					
INPUT	VOLTAGE RANGE	85 ~ 264VAC				
	FREQUENCY RANGE	47 ~ 440Hz				
	EFFICIENCY (Typ.)	84%	87.5%	89%	90%	91%
	AC CURRENT (Typ.)	1.8A/115VAC      1A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 30A/115VAC      60A/230VAC				
	LEAKAGE CURRENT	< 0.25mA/240VAC				
PROTECTION	OVERLOAD	105% ~ 160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	5.25 ~ 6.75V	12.6 ~ 16.2V	15.75 ~ 20.25V	25.2 ~ 32.4V	50.4 ~ 64.8V
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	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 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 EN55022 (CISPR22) Class B, EN61000-3-2,-3				
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level (surge L-N : 1KV), criteria A				
	MTBF	1226Khrs min.      MIL-HDBK-217F (25°C)				
	DIMENSION	PCB mounting style : 87*52*29.5mm (L*W*H)				
NOTE	PACKING	PCB mounting style : 0.23Kg;60pcs/14.8Kg/0.97CUFT				
	NOTE	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.				

## Mechanical Specification

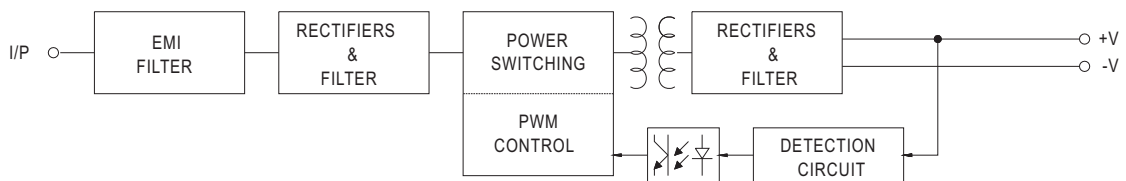
Case No. IRM60 Unit:mm



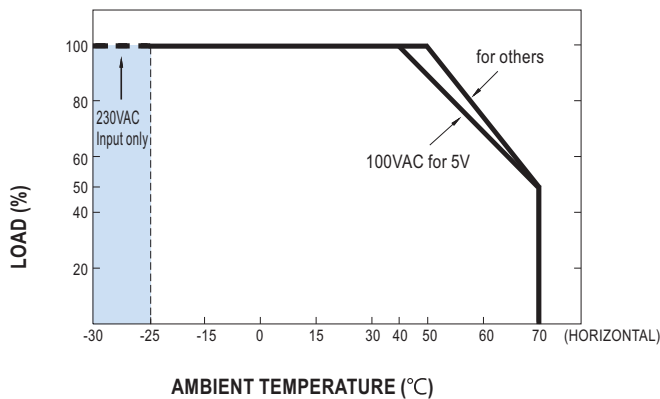
AC/L, AC/N P/N diameter:1ψ  
+V, -V P/N diameter:2ψ

## Block Diagram

fosc : 65KHz



## Derating Curve



## Output Derating VS Input Voltage

