



## ■ 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

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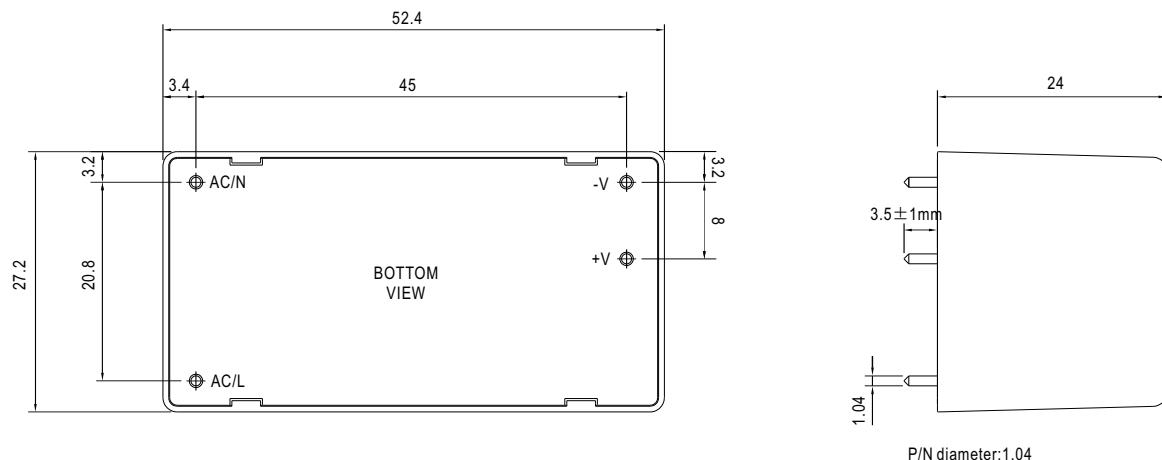
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## SPECIFICATION

MODEL	IRM-20-3.3	IRM-20-5	IRM-20-12	IRM-20-15	IRM-20-24
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V
	RATED CURRENT	4.5A	4A	1.8A	1.4A
	CURRENT RANGE	0 ~ 4.5A	0 ~ 4A	0 ~ 1.8A	0 ~ 1.4A
	RATED POWER	14.85W	20W	21.6W	21W
	RIPLPE & NOISE (max.) Note.2	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.5%	±2.5%	±2.5%
	LINE REGULATION	±0.5%	±0.5%	±0.3%	±0.3%
	LOAD REGULATION	±1%	±1%	±0.5%	±0.5%
	SETUP, RISE TIME	1000ms, 20ms/230VAC	1000ms, 20ms/115VAC at full load		
INPUT	HOLD UP TIME (Typ.)	40ms/230VAC	8ms/115VAC at full load		
	VOLTAGE RANGE	85 ~ 264VAC	120 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 440Hz			
	EFFICIENCY (Typ.)	76%	79%	84%	84%
	AC CURRENT (Typ.)	0.6A/115VAC	0.4A/230VAC		
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC	40A/230VAC		
PROTECTION	LEAKAGE CURRENT	< 0.25mA/240VAC			
	OVERLOAD	115%~160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	3.8 ~ 4.46V	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V
		Protection type : Shut off o/p voltage, clamping by zener diode			
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 approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC			
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25 / 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	970.3Khrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	52.4*27.2*24mm (L*W*H)			
	PACKING	0.059Kg/240pcs/15.2Kg/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. 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.				

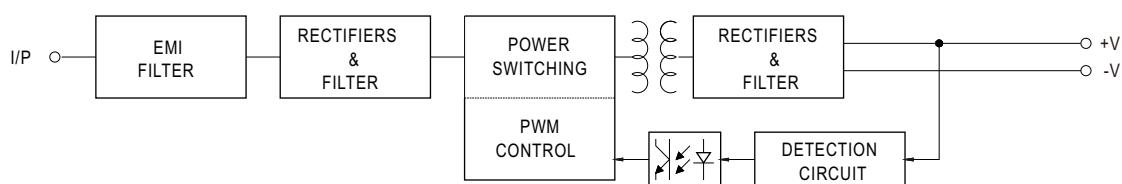
## ■ Mechanical Specification

Case No.219A Unit:(mm)



## ■ Block Diagram

fosc : 100KHz



## ■ Derating Curve

## ■ Output Derating VS Input Voltage

