



■ 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

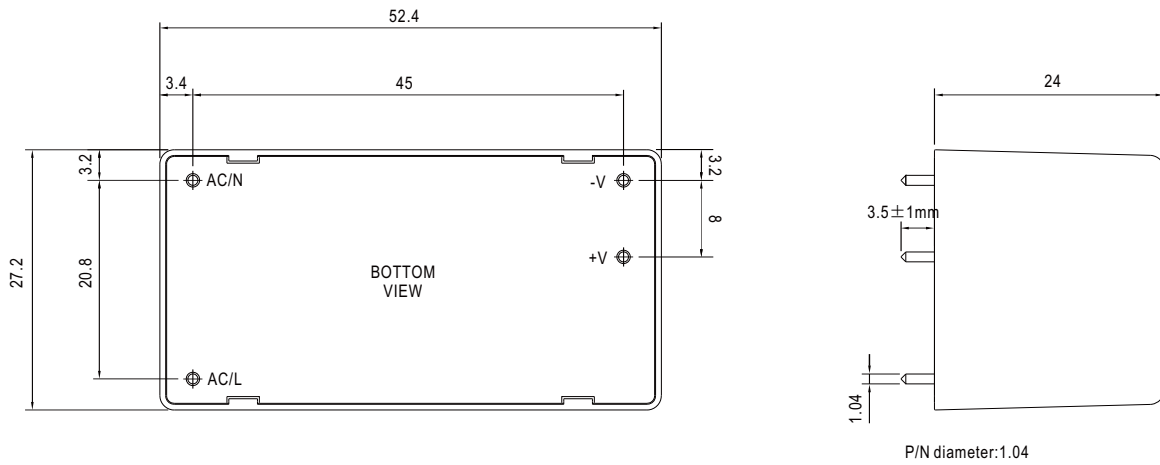


SPECIFICATION

| 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 | 24V |
| | RATED CURRENT | 4.5A | 4A | 1.8A | 1.4A | 0.9A |
| | CURRENT RANGE | 0 ~ 4.5A | 0 ~ 4A | 0 ~ 1.8A | 0 ~ 1.4A | 0 ~ 0.9A |
| | RATED POWER | 14.85W | 20W | 21.6W | 21W | 21.6W |
| | 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 | ± 0.5% | ± 0.5% | ± 0.3% | ± 0.3% | ± 0.3% |
| | LOAD REGULATION | ± 1% | ± 1% | ± 0.5% | ± 0.5% | ± 0.5% |
| | SETUP, RISE TIME | 1000ms, 20ms/230VAC 1000ms, 20ms/115VAC at full load | | | | |
| HOLD UP TIME (Typ.) | 40ms/230VAC 8ms/115VAC at full load | | | | | |
| INPUT | VOLTAGE RANGE | 85 ~ 264VAC 120 ~ 370VDC | | | | |
| | FREQUENCY RANGE | 47 ~ 440Hz | | | | |
| | EFFICIENCY (Typ.) | 76% | 79% | 84% | 84% | 85% |
| | AC CURRENT (Typ.) | 0.6A/115VAC 0.4A/230VAC | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 20A/115VAC 40A/230VAC | | | | |
| LEAKAGE CURRENT | < 0.25mA/240VAC | | | | | |
| PROTECTION | 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 | 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 | 970.3Khrs min. MIL-HDBK-217F (25°C) | | | | |
| | DIMENSION | 52.4*27.2*24mm (L*W*H) | | | | |
| | PACKING | 0.05Kg/240pcs/13Kg/0.97CUFT | | | | |
| NOTE | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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.</p> <p>5. 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).</p> | | | | | |

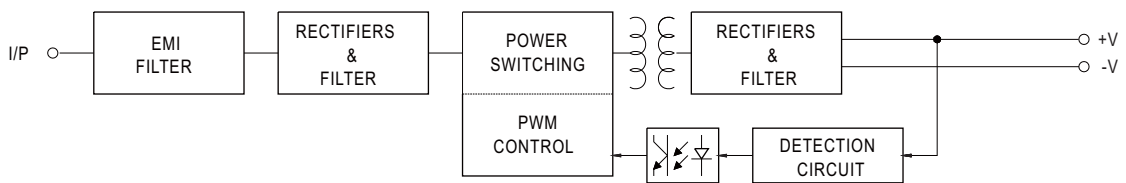
■ Mechanical Specification

Case No.219A Unit:(mm)

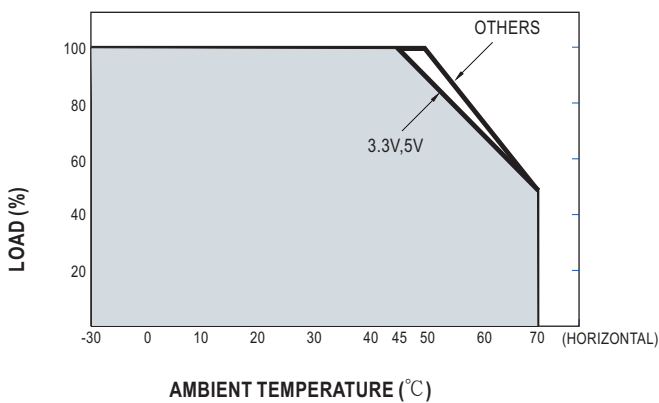


■ Block Diagram

fosc: 100KHz



■ Derating Curve



■ Output Derating VS Input Voltage

