



#### ■ Features :

- Universal AC input / Full range
- Compact size
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Isolation class  ${\rm I\hspace{-.1em}I}$
- No load power consumption<0.1W
- 100% full load burn-in test
- High reliability
- 3 years warranty

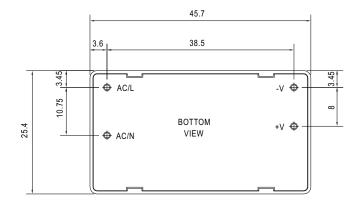
# c**¶**Us ☐ CB(€

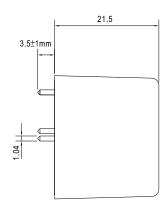
| MODEL       |                                                                                                                          | IRM-05-3.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | IRM-05-5     | IRM-05-12    | IRM-05-15      | IRM-05-24    |
|-------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|----------------|--------------|
| OUTPUT      | DC VOLTAGE                                                                                                               | 3.3V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 5V           | 12V          | 15V            | 24V          |
|             | RATED CURRENT                                                                                                            | 1.25A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1A           | 0.42A        | 0.33A          | 0.23A        |
|             | CURRENT RANGE                                                                                                            | 0 ~ 1.25A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0 ~ 1A       | 0 ~ 0.42A    | 0 ~ 0.33A      | 0 ~ 0.23A    |
|             | RATED POWER                                                                                                              | 4.125W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 5W           | 5.04W        | 4.95W          | 5.52W        |
|             | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | <u> </u>     |                |              |
|             | HOLD UP TIME (Typ.)                                                                                                      | 80ms/230VAC 15ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |              |                |              |
| INPUT       | VOLTAGE RANGE                                                                                                            | 85 ~ 264VAC 120 ~ 370VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |              |                |              |
|             | FREQUENCY RANGE                                                                                                          | 47 ~ 440Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |              |                |              |
|             | EFFICIENCY (Typ.)                                                                                                        | 68%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 71%          | 75%          | 75%            | 77%          |
|             | AC CURRENT (Typ.)                                                                                                        | 0.12A/115VAC 0.08A/230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |              |                |              |
|             | INRUSH CURRENT (Typ.)                                                                                                    | COLD START 20A/115VAC 40A/230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |              |                |              |
|             | LEAKAGE CURRENT                                                                                                          | < 0.25mA/240VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |              |                |              |
| PROTECTION  |                                                                                                                          | 115% ~ 260% rated output power                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |              |                |              |
|             | OVERLOAD                                                                                                                 | 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 |
|             |                                                                                                                          | 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℃, 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 STANDARDS                                                                                                         | UL60950-1, TUV EN60950-1 approved                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |              |                |              |
| SAFETY &    | WITHSTAND VOLTAGE                                                                                                        | I/P-O/P:3KVAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              |              |                |              |
| EMC         | ISOLATION RESISTANCE                                                                                                     | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |              |                |              |
| (Note 4)    | 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                                                                                                                     | 1495.8Khrs min. MIL-HDBK-217F (25°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |              |                |              |
|             | DIMENSION                                                                                                                | 45.7*25.4*21.5 mm (L*W*H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |              |                |              |
|             | PACKING                                                                                                                  | 0.04Kg;270pcs/ 11.8Kg/0.97CUFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |              |                |              |
| NOTE        | All parameters NOT special     Ripple & noise are measure     Tolerance: includes set up     Length of set up time is me | lly mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  ed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  tolerance, line regulation and load regulation.  easured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.  lered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets |              |              |                |              |



### ■ Mechanical Specification

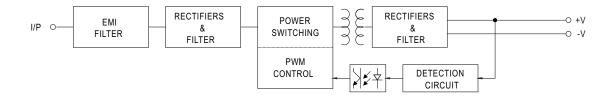
Case No.222A Unit:(mm)





P/N diameter:1.04

### ■ Block Diagram



## ■ Derating Curve

## ■ Output Derating VS Input Voltage

