



#### ■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 56KHz
- 2 years warranty

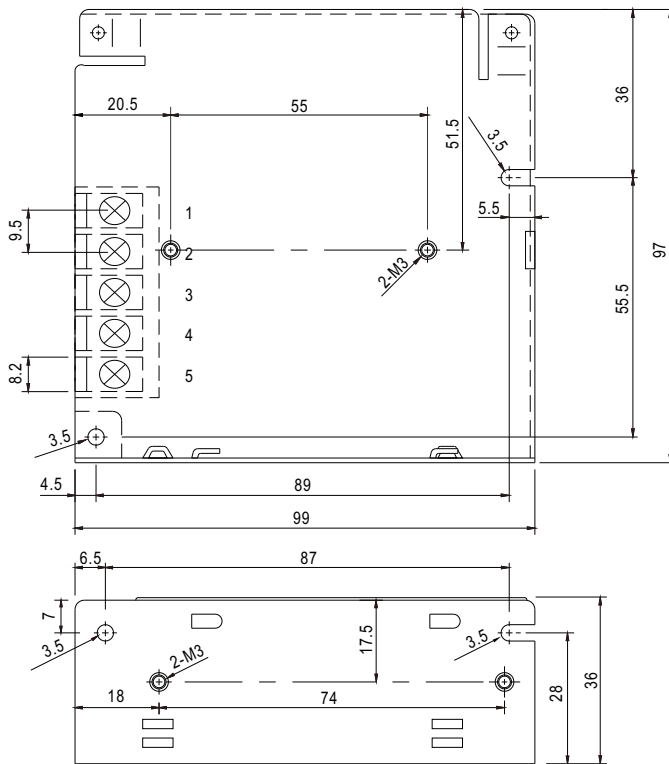


#### SPECIFICATION

| MODEL       |                                                                                                                                                                                                                                                                                                                                                  | S-25-5                                                                                                                   | S-25-12       | S-25-15         | S-25-24       |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|---------------|
| OUTPUT      | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                       | 5V                                                                                                                       | 12V           | 15V             | 24V           |
|             | RATED CURRENT                                                                                                                                                                                                                                                                                                                                    | 5A                                                                                                                       | 2.1A          | 1.7A            | 1.1A          |
|             | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                    | 0 ~ 5A                                                                                                                   | 0 ~ 2.1A      | 0 ~ 1.7A        | 0 ~ 1.1A      |
|             | RATED POWER                                                                                                                                                                                                                                                                                                                                      | 25W                                                                                                                      | 25.2W         | 25.5W           | 26.4W         |
|             | RIPPLE & NOISE (max.) <small>Note.2</small>                                                                                                                                                                                                                                                                                                      | 50mVp-p                                                                                                                  | 100mVp-p      | 100mVp-p        | 100mVp-p      |
|             | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                               | 4.75 ~ 5.5V                                                                                                              | 10.8 ~ 13.2V  | 13.5 ~ 16.5V    | 21.6 ~ 26.4V  |
|             | VOLTAGE TOLERANCE <small>Note.3</small>                                                                                                                                                                                                                                                                                                          | ± 2.0%                                                                                                                   | ± 1.0%        | ± 1.0%          | ± 1.0%        |
|             | LINE REGULATION                                                                                                                                                                                                                                                                                                                                  | ± 0.5%                                                                                                                   | ± 0.5%        | ± 0.5%          | ± 0.5%        |
|             | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                  | ± 1.0%                                                                                                                   | ± 0.5%        | ± 0.5%          | ± 0.5%        |
|             | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                 | 300ms, 50ms/230VAC      800ms, 50ms/115VAC at full load                                                                  |               |                 |               |
|             | HOLD UP TIME (Typ.)                                                                                                                                                                                                                                                                                                                              | 90ms/230VAC      12ms/115VAC at full load                                                                                |               |                 |               |
| INPUT       | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                    | 85 ~ 264VAC      120 ~ 370VDC                                                                                            |               |                 |               |
|             | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                  | 47 ~ 63Hz                                                                                                                |               |                 |               |
|             | EFFICIENCY(Typ.)                                                                                                                                                                                                                                                                                                                                 | 72%/115VAC                                                                                                               | 76%/115VAC    | 77%/115VAC      | 80%/115VAC    |
|             | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                | 0.6A/115VAC      0.35A/230VAC                                                                                            |               |                 |               |
|             | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                            | COLD START 13A/115VAC      25A/230VAC                                                                                    |               |                 |               |
|             | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                  | <0.75mA / 240VAC                                                                                                         |               |                 |               |
| PROTECTION  | OVERLOAD                                                                                                                                                                                                                                                                                                                                         | 105 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed. |               |                 |               |
|             | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                     | 5.75V ~ 6.75V                                                                                                            | 13.8V ~ 16.2V | 17.25V ~ 20.25V | 27.6V ~ 32.4V |
|             |                                                                                                                                                                                                                                                                                                                                                  | Protection type : Hiccup mode, recovers automatically after fault condition is removed.                                  |               |                 |               |
| ENVIRONMENT | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                    | -10 ~ +60℃ (Refer to output load derating curve)                                                                         |               |                 |               |
|             | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                 | 20 ~ 90% RH non-condensing                                                                                               |               |                 |               |
|             | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                          | -20 ~ +85℃, 10 ~ 95% RH                                                                                                  |               |                 |               |
|             | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                | ±0.03%/℃ (0 ~ 50℃)                                                                                                       |               |                 |               |
|             | VIBRATION                                                                                                                                                                                                                                                                                                                                        | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                  |               |                 |               |
| SAFETY      | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                 | UL1012, TUV EN60950-1 approved                                                                                           |               |                 |               |
|             | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                | I/P-O/P:3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC                                                                        |               |                 |               |
|             | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                             | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH                                                                |               |                 |               |
| OTHERS      | MTBF                                                                                                                                                                                                                                                                                                                                             | 330.8K hrs min.      MIL-HDBK-217F (25℃)                                                                                 |               |                 |               |
|             | DIMENSION                                                                                                                                                                                                                                                                                                                                        | 99*97*36mm (L*W*H)                                                                                                       |               |                 |               |
|             | PACKING                                                                                                                                                                                                                                                                                                                                          | 0.39Kg; 45pcs/18Kg/0.9CUFT                                                                                               |               |                 |               |
| NOTE        | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation. |                                                                                                                          |               |                 |               |

## Mechanical Specification

Case No. 905 Unit:mm

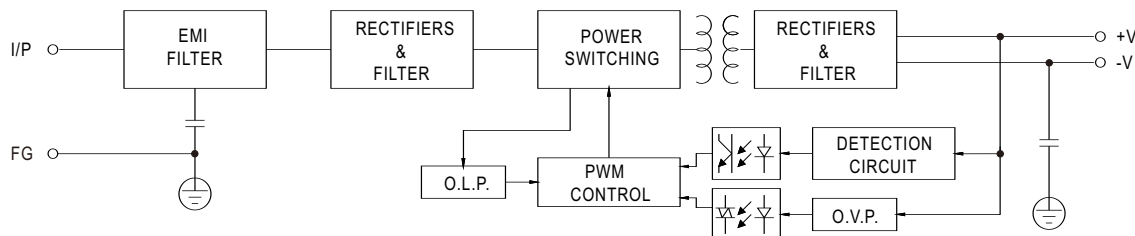


Terminal Pin No. Assignment

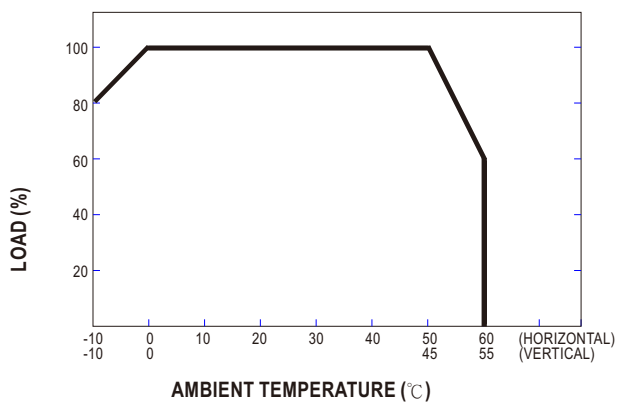
| Pin No. | Assignment   | Pin No. | Assignment |
|---------|--------------|---------|------------|
| 1       | DC OUTPUT -V | 4       | AC/L       |
| 2       | DC OUTPUT +V | 5       | AC/N       |
| 3       | FG $\equiv$  |         |            |

## Block Diagram

fosc : 56KHz



## Derating Curve



## Static Characteristics (24V)

