



- Features :
- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- 1500VAC I/O isolation
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Fixed switching frequency at 83KHz
- Low cost
- High reliability
- 2 years warranty

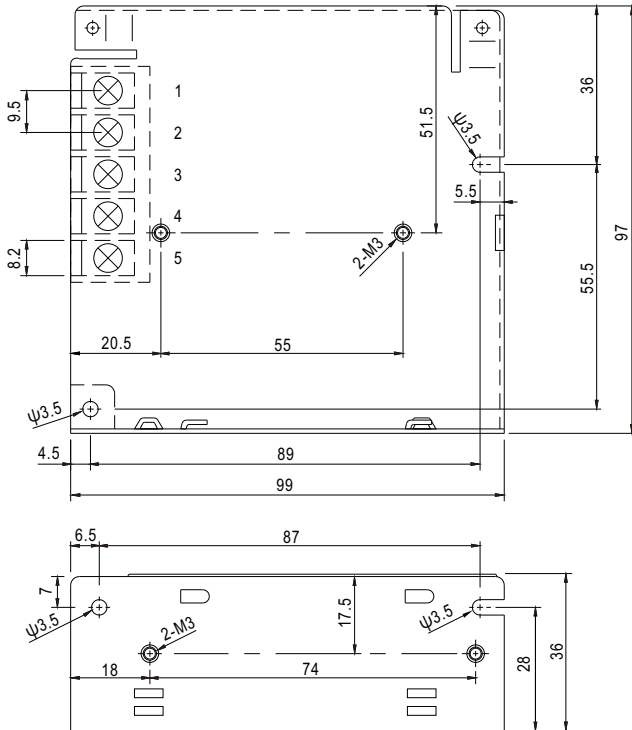


**SPECIFICATION**

| MODEL                     |                                | SD-25A-5   | SD-25B-5 | SD-25C-5                | SD-25A-12           | SD-25B-12               | SD-25C-12 | SD-25A-24             | SD-25B-24 | SD-25C-24 |
|---------------------------|--------------------------------|--|----------|-------------------------|---------------------|-------------------------|-----------|-----------------------|-----------|-----------|
| OUTPUT                    | DC VOLTAGE                     | 5V   |          |                         | 12V                 |                         |           | 24V                   |           |           |
|                           | RATED CURRENT                  | 5A   |          |                         | 2.1A                |                         |           | 1.1A                  |           |           |
|                           | CURRENT RANGE                  | 0 ~ 5A   |          |                         | 0 ~ 2.1A            |                         |           | 0 ~ 1.1A              |           |           |
|                           | RATED POWER                    | 25W  |          |                         | 25.2W               |                         |           | 26.4W                 |           |           |
|                           | RIPPLE & NOISE (max.) Note.2   | 100mVp-p   |          |                         | 120mVp-p            |                         |           | 150mVp-p              |           |           |
|                           | VOLTAGE ADJ. RANGE             | 4.5 ~ 5.5VDC   |          |                         | 11 ~ 16VDC          |                         |           | 23 ~ 30VDC            |           |           |
|                           | VOLTAGE TOLERANCE Note.3       | ±2.0%  |          |                         | ±1.0%               |                         |           | ±1.0%                 |           |           |
|                           | LINE REGULATION                | ±0.5%  |          |                         | ±0.3%               |                         |           | ±0.2%                 |           |           |
|                           | LOAD REGULATION                | ±0.5%  |          |                         | ±0.3%               |                         |           | ±0.2%                 |           |           |
| SETUP, RISE, HOLD UP TIME | 2.5s, 50ms, ----- at full load |  |          |                         |                     |                         |           |                       |           |           |
| INPUT                     | VOLTAGE RANGE                  | A:9.2 ~ 18VDC  |          | B:19 ~ 36VDC            |                     | C:36 ~ 72VDC            |           |                       |           |           |
|                           | EFFICIENCY (Typ.)              | 71%  | 72%      | 74%                     | 72%                 | 75%                     | 78%       | 75%                   | 78%       | 81%       |
|                           | DC CURRENT                     | 3.2A/12V   | 1.6A/24V | 0.8A/48V                | 3.2A/12V            | 1.6A/24V                | 0.8A/48V  | 3.2A/12V              | 1.6A/24V  | 0.8A/48V  |
| PROTECTION                | OVERLOAD                       | 105 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed  |          |                         |                     |                         |           |                       |           |           |
|                           | OVER VOLTAGE                   | 5.75 ~ 6.75V/10% load  |          |                         | 16.8 ~ 20V/10% load |                         |           | 31.5 ~ 37.5V/10% load |           |           |
| ENVIRONMENT               | WORKING TEMP.                  | -10 ~ +60°C (Refer to "Derating Curve")  |          |                         |                     |                         |           |                       |           |           |
|                           | WORKING HUMIDITY               | 20 ~ 90% RH non-condensing   |          |                         |                     |                         |           |                       |           |           |
|                           | STORAGE TEMP., HUMIDITY        | -20 ~ +85°C, 10 ~ 95% RH   |          |                         |                     |                         |           |                       |           |           |
|                           | TEMP. COEFFICIENT              | ±0.03%/°C (0 ~ 50°C)   |          |                         |                     |                         |           |                       |           |           |
|                           | VIBRATION                      | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes   |          |                         |                     |                         |           |                       |           |           |
| SAFETY & EMC (Note 4)     | SAFETY STANDARDS               | Design refer to LVD, EAC TP TC 004 approved  |          |                         |                     |                         |           |                       |           |           |
|                           | WITHSTAND VOLTAGE              | I/P-O/P:1.5KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC  |          |                         |                     |                         |           |                       |           |           |
|                           | ISOLATION RESISTANCE           | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH   |          |                         |                     |                         |           |                       |           |           |
|                           | EMC EMISSION                   | Compliance to EN55032 (CISPR32) Class B, EAC TP TC 020   |          |                         |                     |                         |           |                       |           |           |
| OTHERS                    | EMC IMMUNITY                   | Compliance to EN61000-4-2,3,4,6,8, EN55024,heavy industry level, criteria A, EAC TP TC 020   |          |                         |                     |                         |           |                       |           |           |
|                           | MTBF                           | 374.3K hrs min.(SD-25A)  |          | 365.9K hrs min.(SD-25B) |                     | 377.5K Hrs min.(SD-25C) |           | MIL-HDBK-217F (25°C)  |           |           |
|                           | DIMENSION                      | 99*97*36mm (L*W*H)   |          |                         |                     |                         |           |                       |           |           |
| NOTE                      | PACKING                        | 0.38Kg; 45pcs/17.8Kg/0.9CUFT   |          |                         |                     |                         |           |                       |           |           |
|                           |                                | 1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25°C 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.<br>4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )<br>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). |          |                         |                     |                         |           |                       |           |           |

**Mechanical Specification**

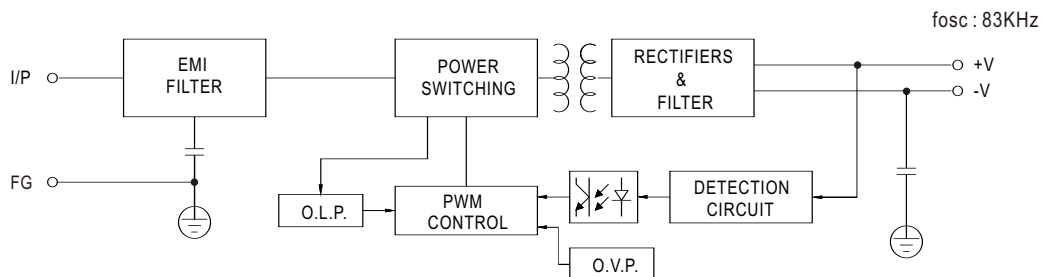
Case No. 905 Unit:mm



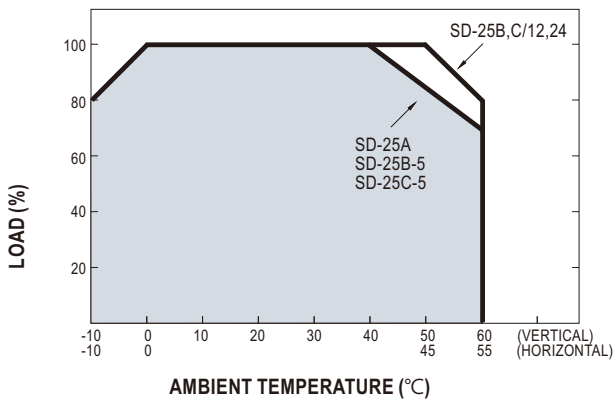
Terminal Pin No. Assignment

| Pin No. | Assignment  | Pin No. | Assignment   |
|---------|-------------|---------|--------------|
| 1       | DC INPUT V- | 4       | DC OUTPUT +V |
| 2       | DC INPUT V+ | 5       | DC OUTPUT -V |
| 3       | FG $\pm$    |         |              |

**Block Diagram**



**Derating Curve**



**Static Characteristics(SD-25C-24V)**

