

■ 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
- 24V and 48V input voltage design refer to LVD
- Low cost
- High reliability
- 2 years warranty

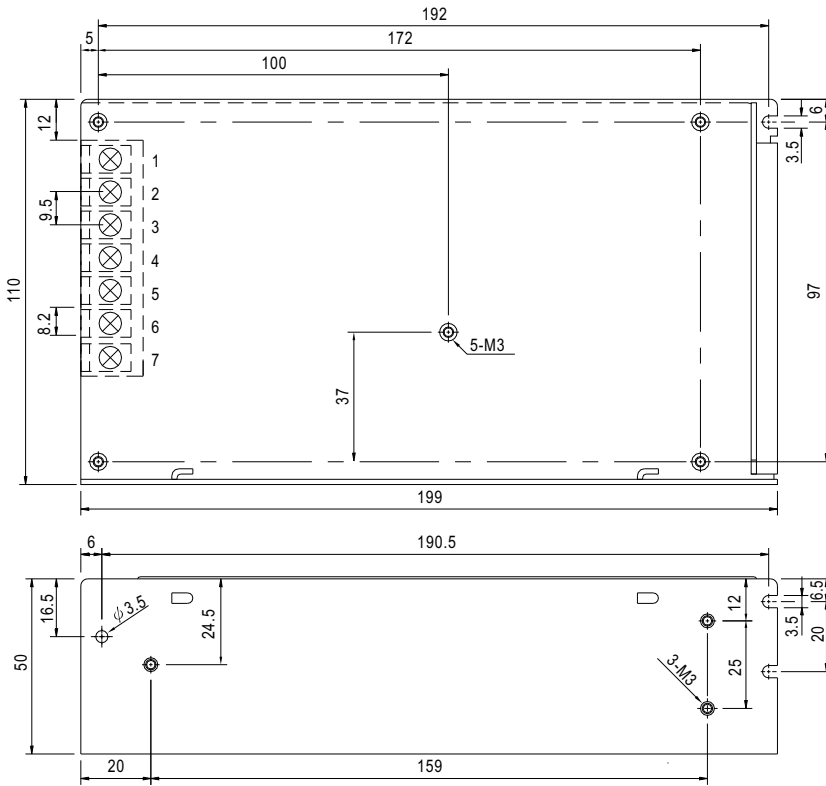
**CB** (for D type only) **CE**

**SPECIFICATION**

| MODEL                 |   | SD-150B-12  | SD-150C-12               | SD-150D-12                  | SD-150B-24            | SD-150C-24 | SD-150D-24 |
|-----------------------|---|---|--------------------------|-----------------------------|-----------------------|------------|------------|
| OUTPUT                | DC VOLTAGE  | 12V   |                          |                             | 24V                   |            |            |
|                       | RATED CURRENT   | 12.5A   |                          |                             | 6.3A                  |            |            |
|                       | CURRENT RANGE   | 0 ~ 12.5A   |                          |                             | 0 ~ 6.3A              |            |            |
|                       | RATED POWER   | 150W  |                          |                             | 151.2W                |            |            |
|                       | RIPPLE & NOISE (max.) Note.2  | 120mVp-p  |                          |                             | 150mVp-p              |            |            |
|                       | VOLTAGE ADJ. RANGE  | 11 ~ 16VDC  |                          |                             | 23 ~ 30VDC            |            |            |
|                       | VOLTAGE TOLERANCE Note.3  | ±1.0%   |                          |                             | ±1.0%                 |            |            |
|                       | LINE REGULATION   | ±0.5%   |                          |                             | ±0.3%                 |            |            |
|                       | LOAD REGULATION   | ±0.5%   |                          |                             | ±0.3%                 |            |            |
|                       | SETUP, RISE TIME  | 2s, 50ms(only D mode) at full load  |                          |                             |                       |            |            |
| HOLD UP TIME (Typ.)   | 24ms(only D mode) at full load  |   |                          |                             |                       |            |            |
| INPUT                 | VOLTAGE RANGE   | B:19 ~ 36VDC  | C:36 ~ 72VDC             | D:72 ~144VDC or 85 ~ 132VAC |                       |            |            |
|                       | EFFICIENCY (Typ.)   | 75%   | 77%                      | 79%                         | 77%                   | 80%        | 82%        |
|                       | DC CURRENT (Typ.)   | 6.8A/24V  | 3.4A/48V                 | 2.7A/96V                    | 6.8A/24V              | 3.4A/48V   | 2.7A/96V   |
|                       | INRUSH CURRENT (Typ.)   | D:22.5A/96VDC   |                          |                             |                       |            |            |
|                       | LEAKAGE CURRENT   | <0.75mA / 120VAC (SD-150D)  |                          |                             |                       |            |            |
| PROTECTION            | OVERLOAD  | 105 ~ 135% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |                          |                             |                       |            |            |
|                       | OVER VOLTAGE  | 16.8V ~ 20V/10% LOAD  |                          |                             | 31.5 ~ 37.5V/10% LOAD |            |            |
| ENVIRONMENT           | WORKING TEMP.   | -10 ~ +60°C (Refer to output load 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  | IEC60950-1 CB approved by TUV (for D type only)   |                          |                             |                       |            |            |
|                       | WITHSTAND VOLTAGE   | I/P-O/P:1.5KVAC 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°C / 70% RH  |                          |                             |                       |            |            |
|                       | EMI CONDUCTION & RADIATION  | Compliance to EN55022 (CISPR22) Class B   |                          |                             |                       |            |            |
| OTHERS                | EMS IMMUNITY  | Compliance to EN61000-4-2,3,4,6,8; ENV50204, light industry level, criteria A   |                          |                             |                       |            |            |
|                       | MTBF  | 296.2K hrs min.(SD-150B)  | 289.9K hrs min.(SD-150C) | 289K Hrs min.(SD-150D)      | MIL-HDBK-217F (25°C)  |            |            |
|                       | DIMENSION   | 199*110*50mm (L*W*H)  |                          |                             |                       |            |            |
|                       | PACKING   | 0.86Kg; 16pcs/14.5Kg/0.95CUFT   |                          |                             |                       |            |            |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 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> |   |                          |                             |                       |            |            |

**Mechanical Specification**

Case No. 906 Unit:mm



**Terminal Pin No. Assignment**

| Pin No. | Assignment | Pin No. | Assignment   |
|---------|------------|---------|--------------|
| 1,2     | INPUT ※    | 4,5     | DC OUTPUT -V |
| 3       | FG ≡       | 6,7     | DC OUTPUT +V |

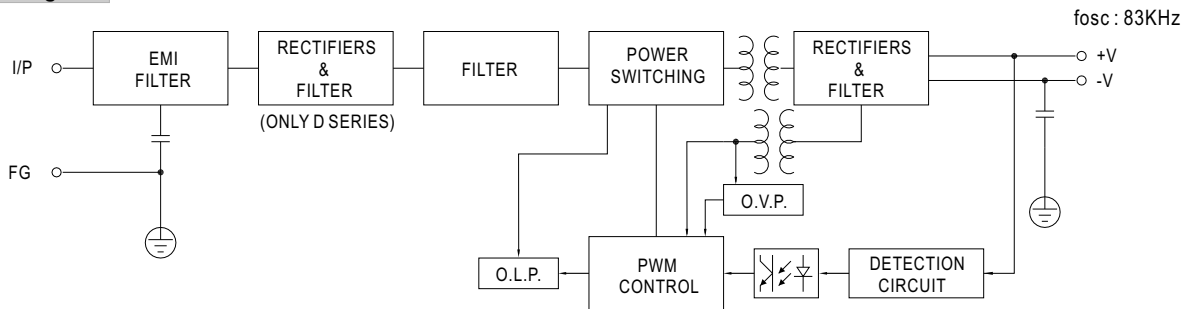
※ SD-150B,C

| Pin No. | Assignment  |
|---------|-------------|
| 1       | DC INPUT V+ |
| 2       | DC INPUT V- |

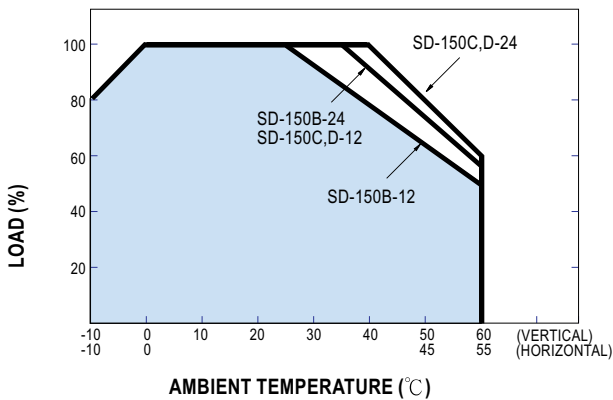
※ SD-150D

| Pin No. | Assignment  |
|---------|-------------|
| 1,2     | AC/DC INPUT |

**Block Diagram**



**Derating Curve**



**Static Characteristics (24V)**

