


**■ Features :**

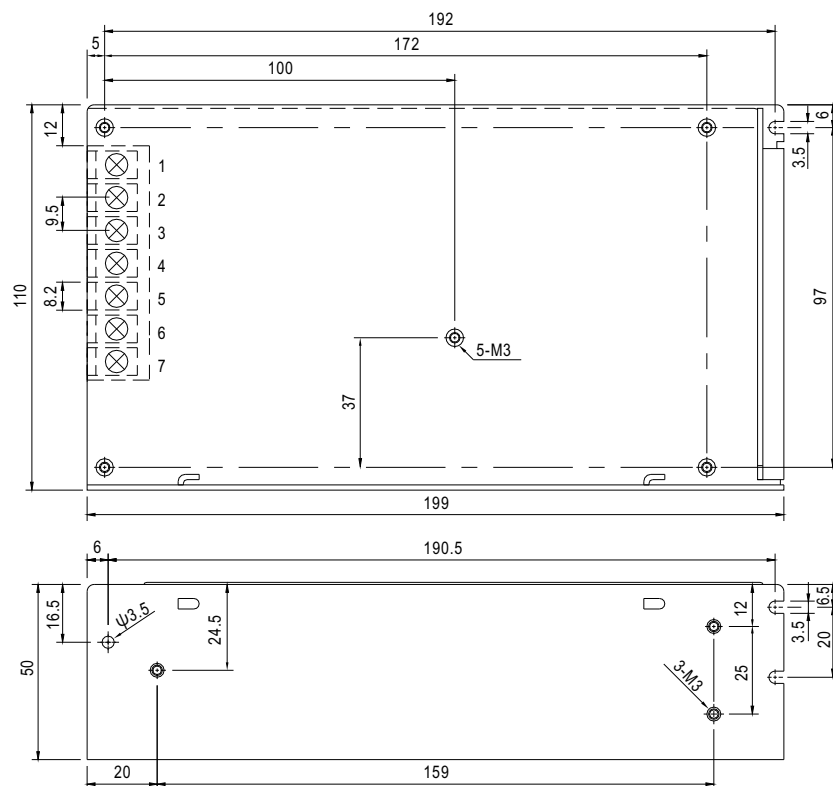
- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- 1500VAC I/O isolation
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- 24V and 48V input voltage design refer to LVD
- Low cost
- High reliability
- 2 years warranty

**EAC 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.)   | 8.5A/24V   | 4.2A/48V   | 2.1A/96V                    | 8.5A/24V               | 4.2A/48V             | 2.1A/96V   |
|  | INRUSH CURRENT (Typ.)   | D:22.5A/96VDC  |            |                             |                        |                      |            |
|  | LEAKAGE CURRENT   | <0.75mA / 120VAC (SD-150D)   |            |                             |                        |                      |            |
| PROTECTION   | OVERLOAD  | 105 ~ 135% rated output power  |            |                             |                        |                      |            |
|  |   | Protection type : Hiccup mode, recovers automatically after fault condition is removed       |            |                             |                        |                      |            |
|  | OVER VOLTAGE  | 16.8V ~ 20V/10% LOAD   |            |                             | 31.5 ~ 37.5V/10% LOAD  |                      |            |
| Protection type : Hiccup mode, recovers automatically after fault condition is removed |   |  |            |                             |                        |                      |            |
| 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<br>(Note 4)   | SAFETY STANDARDS  | IEC60950-1 CB approved by TUV (for D type only), 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                                   |            |                             |                        |                      |            |
|  | EMI CONDUCTION & RADIATION  | Compliance to EN55032 (CISPR32) Class B, EAC TP TC 020                                       |            |                             |                        |                      |            |
|  | EMS IMMUNITY  | Compliance to EN61000-4-2,3,4,6,8; ENV50204, light industry level, criteria A, EAC TP TC 020 |            |                             |                        |                      |            |
| OTHERS   | 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   | 1. All parameters NOT specially mentioned are measured at 24,48,96VDC 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. 906 Unit:mm



## Terminal Pin No. Assignment

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

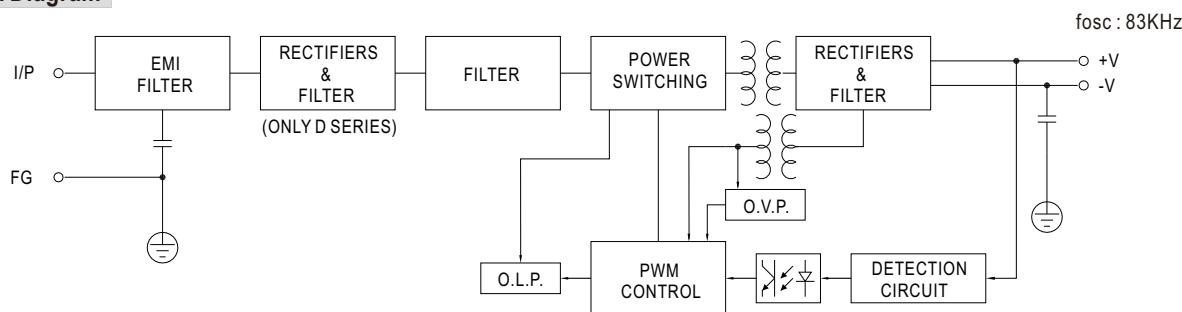
## ※ SD-150B,C

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

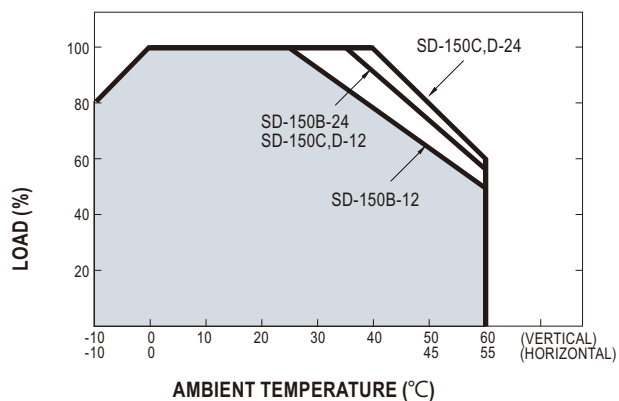
## ※ SD-150D

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

## Block Diagram



## Derating Curve



## Static Characteristics (24V)

