



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

## **SPECIFICATION**

CB(for D type only) ( €

| MODEL           |  | SD-100B-5  | SD-100C-5       | SD-100D-5 | SD-100B-12                  | SD-100C-12 | SD-100D-12 | SD-100B-24 | SD-100C-24 | SD-100D-24 |
|-----------------|--|--|-----------------|-----------|-----------------------------|------------|------------|------------|------------|------------|
| ОИТРИТ          | DC VOLTAGE   | 5V   |                 |           | 12V                         |            |            | 24V        |            |            |
|                 | RATED CURRENT  | 20A  |                 |           | 8.5A                        |            |            | 4.2A       |            |            |
|                 | CURRENT RANGE  | 0~20A  |                 |           | 0 ~ 8.5A                    |            |            | 0 ~ 4.2A   |            |            |
|                 | RATED POWER  | 100W   |                 |           | 102W                        |            |            | 100.8W     |            |            |
|                 | 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 TIME   | 2s, 50ms(only  | / D mode) at fu | ıll load  |                             |            |            |            |            |            |
|                 | HOLD UP TIME (Typ.)  | 20ms(only D mode) at full load   |                 |           |                             |            |            |            |            |            |
| INPUT           | VOLTAGE RANGE  | B:19 ~ 36VD0   | C:36~           | 72VDC D   | :72 ~ 144VDC or 85 ~ 132VAC |            |            |            |            |            |
|                 | EFFICIENCY (Typ.)  | 74%  | 75%             | 76%       | 75%                         | 77%        | 80%        | 78%        | 81%        | 83%        |
|                 | DC CURRENT (Typ.)  | 4.8A/24V   | 2.4A/48V        | 1.8A/96V  | 4.8A/24V                    | 2.4A/48V   | 1.8A/96V   | 4.8A/24V   | 2.4A/48V   | 1.8A/96V   |
|                 | INRUSH CURRENT (Typ.)  | D:18A/96VDC  |                 |           |                             |            |            |            |            |            |
|                 | LEAKAGE CURRENT  | <0.75mA/120VAC(SD-100D)  |                 |           |                             |            |            |            |            |            |
| PROTECTION      |  | 105 ~ 135% rated output power  |                 |           |                             |            |            |            |            |            |
|                 | OVERLOAD   | 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                            |                 |           |                             |            |            |            |            |            |
|                 | OVER VOLIAGE   | 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 STANDARDS   | IEC60950-1 CB approved by TUV (for D type only)  |                 |           |                             |            |            |            |            |            |
| SAFETY &        | WITHSTAND VOLTAGE  | I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC  |                 |           |                             |            |            |            |            |            |
| EMC<br>(Note 4) | 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  |                 |           |                             |            |            |            |            |            |
|                 | EMS IMMUNITY   | Compliance to EN61000-4-2,3,4,6,8; ENV50204, light industry level, criteria A                  |                 |           |                             |            |            |            |            |            |
| OTHERS          | MTBF   | 356.7K hrs min.(SD-100B) 355.5K hrs min.(SD-100C) 341.9K Hrs min.(SD-100D) MIL-HDBK-217F (25℃) |                 |           |                             |            |            |            |            |            |
|                 | DIMENSION  | 199*98*38mm (L*W*H)  |                 |           |                             |            |            |            |            |            |
|                 | PACKING  |  | s/13.8Kg/0.8C   |           |                             |            |            |            |            |            |
| NOTE            | <ol> <li>All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)</li> </ol> |  |                 |           |                             |            |            |            |            |            |



