



EMC directives.

## ■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- 1500VDC 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

## $\mathsf{CB}$ (for D type only) $\mathsf{CE}$

## **SPECIFICATION** SD-100B-12 | SD-100C-12 | SD-100D-12 | SD-100B-24 | SD-100C-24 | SD-100D-24 MODEL SD-100B-5 SD-100C-5 SD-100D-5 **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 **OUTPUT** 23 ~ 30VDC **VOLTAGE ADJ. RANGE** 4.5 ~ 5.5 VDC 11 ~ 16VDC **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 full load HOLD UP TIME (Typ.) 20ms(only D mode) at full load B:19 ~ 36VDC **VOLTAGE RANGE** C:36 ~ 72VDC D:72 ~ 144VDC or 85 ~ 132VAC **EFFICIENCY (Typ.)** 74% 75% 76% 75% 77% 78% 81% 83% 80% 2.4A/48V DC CURRENT (Typ.) 4.8A/24V 2.4A/48V 1.8A/96V 4.8A/24V 2.4A/48V 1.8A/96V 4.8A/24V 1.8A/96V INPUT **INRUSH CURRENT (Typ.)** D:18A/96VDC LEAKAGE CURRENT <0.75mA/120VAC(SD-100D) 105 ~ 135% rated output power **OVERLOAD** Protection type: Hiccup mode, recovers automatically after fault condition is removed PROTECTION 5.75 ~ 6.75V/10% load 16.8 ~ 20V/10% load 31.5 ~ 37.5V/10% load **OVER VOLTAGE** Protection type: Hiccup mode, recovers automatically after fault condition is removed -10 ~ +60°C (Refer to output load derating curve) WORKING TEMP. **WORKING HUMIDITY** 20 ~ 90% RH non-condensing **ENVIRONMENT** 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) WITHSTAND VOLTAGE I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC **SAFETY & ISOLATION RESISTANCE** I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH **EMC** (Note 4) **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 **MTBF** 355.5K hrs min.(SD-100C) 341.9K Hrs min.(SD-100D) MIL-HDBK-217F (25°C) 356.7K hrs min (SD-100B) **OTHERS DIMENSION** 199\*98\*38mm (L\*W\*H) 0.65Kg; 20pcs/13.8Kg/0.8CUFT **PACKING** 1. All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25°C of ambient temperature. NOTE 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance: includes set up tolerance, line regulation and load regulation. 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



