



## Features:

- 2:1 wide input range
- Protections:Short circuit/Over load/Over voltage/Over temperature
- 1500VDC I/O isolation
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

## **SPECIFICATION**

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| MODEL                       |  | SD-200B  |               |              |            | SD-200C      |            |              |            |  |  |  |
|-----------------------------|--|--|---------------|--------------|------------|--------------|------------|--------------|------------|--|--|--|
| ОИТРИТ                      | DC VOLTAGE   | 5V   | 12V           | 24V          | 48V        | 5V           | 12V        | 24V          | 48V        |  |  |  |
|                             | RATED CURRENT  | 34A  | 16.7A         | 8.4A         | 4.2A       | 40A          | 16.7A      | 8.4A         | 4.2A       |  |  |  |
|                             | CURRENT RANGE  | 0 ~ 34A  | 0 ~ 16.7A     | 0 ~ 8.4A     | 0 ~ 4.2A   | 0 ~ 40A      | 0 ~ 16.7A  | 0 ~ 8.4A     | 0~4.2A     |  |  |  |
|                             | RATED POWER  | 170W   | 200.4W        | 201.6W       | 201.6W     | 200W         | 200.4W     | 201.6W       | 201.6W     |  |  |  |
|                             | RIPPLE & NOISE (max.) Note.2                               | 100mVp-p   | 120mVp-p      | 150mVp-p     | 200mVp-p   | 100mVp-p     | 120mVp-p   | 150mVp-p     | 200mVp-p   |  |  |  |
|                             | VOLTAGE ADJ. RANGE   | 4.5 ~ 5.5VDC   | 11 ~ 16VDC    | 23 ~ 30VDC   | 43 ~ 53VDC | 4.5 ~ 5.5VDC | 11 ~ 16VDC | 23 ~ 30VDC   | 43 ~ 53VDC |  |  |  |
|                             | VOLTAGE TOLERANCE Note.3                                   | ±2.0%  | ±1.0%         | ±1.0%        | ±1.0%      | ±2.0%        | ±1.0%      | ±1.0%        | ±1.0%      |  |  |  |
|                             | LINE REGULATION  | ±0.5%  | ±0.5%         | ±0.5%        | ±0.5%      | ±0.5%        | ±0.5%      | ±0.5%        | ±0.5%      |  |  |  |
|                             | LOAD REGULATION  | ±1.0%  | ±1.0%         | ±1.0%        | ±1.0%      | ±1.0%        | ±1.0%      | ±1.0%        | ±1.0%      |  |  |  |
|                             | SETUP, RISE TIME   | 300ms, 50ms at full load   |               |              |            |              |            |              |            |  |  |  |
| INPUT                       | VOLTAGE RANGE  | B:19 ~ 36VDC   |               |              |            |              |            |              |            |  |  |  |
|                             | EFFICIENCY (Typ.)  | 80%  | 82%           | 85%          | 86%        | 81%          | 84%        | 86%          | 86%        |  |  |  |
|                             | DC CURRENT   | 13.5A/24V  | 13.3A/24V     | 13A/24V      | 13A/24V    | 6.7A/48V     | 6.5A/48V   | 6.2A/48V     | 6.2A/48V   |  |  |  |
|                             | INRUSH CURRENT (max.)                                      | C:50A/48VDC D:50A/96VDC  |               |              |            |              |            |              |            |  |  |  |
| PROTECTION                  | OVER LOAD  | 105 ~ 135% rated output power  |               |              |            |              |            |              |            |  |  |  |
|                             |  | Protection type : Shut down o/p voltage, re-power on to recover  |               |              |            |              |            |              |            |  |  |  |
|                             | OVER VOLTAGE   | 5.75 ~ 6.75V   | 16.8 ~ 20V    | 31.5 ~ 37.5V | 53 ~ 65V   | 5.75 ~ 6.75V | 16.8 ~ 20V | 31.5 ~ 37.5V | 53 ~ 65V   |  |  |  |
|                             |  | Protection type : Shut down o/p voltage, re-power on to recover  |               |              |            |              |            |              |            |  |  |  |
|                             | OVER TEMPERATURE   | 95°C ±5°C (100°C ±5°C for SD-200B-12 only) TSW1 Detect on main power transistor  |               |              |            |              |            |              |            |  |  |  |
|                             |  | Protection type: Shut down o/p voltage, recovers automatically after temperature goes down   |               |              |            |              |            |              |            |  |  |  |
| ENVIRONMENT                 | WORKING TEMP.  | -20 ~ +60 °C (Refer to output load derating curve)   |               |              |            |              |            |              |            |  |  |  |
|                             | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing   |               |              |            |              |            |              |            |  |  |  |
|                             | STORAGE TEMP., HUMIDITY                                    | -40 ~ +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 &<br>EMC<br>(Note 4) | SAFETY STANDARDS   | 24V and 48V input design refer to LVD  |               |              |            |              |            |              |            |  |  |  |
|                             | 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   |               |              |            |              |            |              |            |  |  |  |
|                             | EMI CONDUCTION & RADIATION                                 | Compliance to EN55022 (CISPR22) Class B  |               |              |            |              |            |              |            |  |  |  |
|                             | EMS IMMUNITY   | Compliance to EN61000-4-2,3,4,6,8; ENV50204 heavy industry level, criteria A   |               |              |            |              |            |              |            |  |  |  |
| OTHERS                      | MTBF   | 218.2K hrs min. MIL-HDBK-217F (25°C)   |               |              |            |              |            |              |            |  |  |  |
|                             | DIMENSION  | 215*115*50mm (L*W*H)   |               |              |            |              |            |              |            |  |  |  |
|                             | PACKING  | 1.1Kg; 12pcs/1   | 4.4Kg/0.98CUF | Т            |            |              |            |              |            |  |  |  |
| NOTE                        | Ripple & noise are measure     Tolerance : includes set up | Illy mentioned are measured at 24,48,96VDC input, rated load and 25°C of ambient temperature.  ed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  tolerance, line regulation and load regulation.  lered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets |               |              |            |              |            |              |            |  |  |  |





## Features:

- 2:1 wide input range
- Protections:Short circuit/Over load/Over voltage/Over temperature
- 1500VDC I/O isolation
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

## **SPECIFICATION**

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| MODEL                       |   | SD-200D  |            |              |            |  |  |  |  |
|-----------------------------|---|--|------------|--------------|------------|--|--|--|--|
| ОИТРИТ                      | DC VOLTAGE  | 5V   | 12V        | 24V          | 48V        |  |  |  |  |
|                             | RATED CURRENT   | 40A  | 16.7A      | 8.4A         | 4.2A       |  |  |  |  |
|                             | CURRENT RANGE   | 0~40A  | 0 ~ 16.7A  | 0 ~ 8.4A     | 0~4.2A     |  |  |  |  |
|                             | RATED POWER   | 200W   | 200.4W     | 201.6W       | 201.6W     |  |  |  |  |
|                             | RIPPLE & NOISE (max.) Note.2  | 100mVp-p   | 120mVp-p   | 150mVp-p     | 200mVp-p   |  |  |  |  |
|                             | VOLTAGE ADJ. RANGE  | 4.5 ~ 5.5VDC   | 11 ~ 16VDC | 23 ~ 30VDC   | 43 ~ 53VDC |  |  |  |  |
|                             | VOLTAGE TOLERANCE Note.3  | ±2.0%  | ±1.0%      | ±1.0%        | ±1.0%      |  |  |  |  |
|                             | LINE REGULATION   | ±0.5%  | ±0.5%      | ±0.5%        | ±0.5%      |  |  |  |  |
|                             | LOAD REGULATION   | ±1.0%  | ±1.0%      | ±1.0%        | ±1.0%      |  |  |  |  |
|                             | SETUP, RISE TIME  | 300ms, 50ms at full load   |            |              |            |  |  |  |  |
| INPUT                       | VOLTAGE RANGE   | B:19 ~ 36VDC   |            |              |            |  |  |  |  |
|                             | EFFICIENCY (Typ.)   | 82%  | 82%        | 84%          | 90%        |  |  |  |  |
|                             | DC CURRENT  | 3.3A/96V   | 3.1A/96V   | 3A/96V       | 3A/96V     |  |  |  |  |
|                             | INRUSH CURRENT (max.)   | C:50A/48VDC D:50A/96VDC  |            |              |            |  |  |  |  |
| PROTECTION                  | OVER LOAD   | 105 ~ 135% rated output power  |            |              |            |  |  |  |  |
|                             |   | Protection type: Shut down o/p voltage, re-power on to recover   |            |              |            |  |  |  |  |
|                             | OVER VOLTAGE  | 5.75 ~ 6.75V   | 16.8 ~ 20V | 31.5 ~ 37.5V | 53 ~ 65V   |  |  |  |  |
|                             |   | Protection type: Shut down o/p voltage, re-power on to recover   |            |              |            |  |  |  |  |
|                             | OVER TEMPERATURE  | 85°C±5°C (TSW1) Detect on main power transistor  |            |              |            |  |  |  |  |
|                             |   | Protection type : Shut down o/p voltage, recovers automatically after temperature goes down  |            |              |            |  |  |  |  |
| ENVIRONMENT                 | WORKING TEMP.   | -20 ~ +60°C (Refer to output load derating curve)  |            |              |            |  |  |  |  |
|                             | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing   |            |              |            |  |  |  |  |
|                             | STORAGE TEMP., HUMIDITY   | -40 ~ +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 &<br>EMC<br>(Note 4) | SAFETY STANDARDS  | 24V and 48V input design refer to LVD  |            |              |            |  |  |  |  |
|                             | 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   |            |              |            |  |  |  |  |
|                             | EMI CONDUCTION & RADIATION  | Compliance to EN55022 (CISPR22) Class B  |            |              |            |  |  |  |  |
|                             | EMS IMMUNITY  | Compliance to EN61000-4-2,3,4,6,8; ENV50204 heavy industry level, criteria A   |            |              |            |  |  |  |  |
| OTHERS                      | MTBF  | 218.2K hrs min. MIL-HDBK-217F (25°C)   |            |              |            |  |  |  |  |
|                             | DIMENSION   | 215*115*50mm (L*W*H)   |            |              |            |  |  |  |  |
|                             | PACKING   | 1.1Kg; 12pcs/14.4Kg/0.98CUFT   |            |              |            |  |  |  |  |
| NOTE                        | <ol> <li>Ripple &amp; noise are measure</li> <li>Tolerance : includes set up</li> </ol> | ally mentioned are measured at 24,48,96VDC input, rated load and 25°C of ambient temperature.  ed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  tolerance, line regulation and load regulation.  dered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets |            |              |            |  |  |  |  |



