

### 15W Single Output DC-DC Converter

## SD-15 series

CE



#### Features :

- 2:1 wide input range
- Protections:Short circuit/Over load /voltage
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Low cost
- High reliability
- 2 years warranty

### SPECIFICATION

| MODEL           |  | SD-15A-05  | SD-15B-05    | SD-15C-05    | SD-15A-12    | SD-15B-12 | SD-15C-12    | SD-15A-24    | SD-15B-24 | SD-15C-24 |
|-----------------|--|--|--------------|--------------|--------------|-----------|--------------|--------------|-----------|-----------|
| OUTPUT          | DC VOLTAGE   | 5V   |              |              | 12V          |           |              | 24V          |           |           |
|                 | RATED CURRENT  | 3A   |              |              | 1.25A        |           |              | 0.625A       |           |           |
|                 | CURRENT RANGE  | 0 ~ 3A   |              |              | 0~1.25A      |           |              | 0~0.625A     |           |           |
|                 | RATED POWER  | 15W  |              |              | 15W          |           |              | 15W          |           |           |
|                 | RIPPLE & NOISE (max.) Note.2   | 100mVp-p   |              |              | 120mVp-p     |           |              | 150mVp-p     |           |           |
|                 | VOLTAGE ADJ.RANGE  | 4.75~5.5VDC  |              |              | 10.8~13.2VDC |           |              | 21.6~26.4VDC |           |           |
|                 | 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 ,HOLD UP TIME  | 2.5s, 25ms, 12VDC/24VDC/48VDC at full load   |              |              |              |           |              |              |           |           |
| INPUT           | VOLTAGE RANGE  | A: 9.2 ~18VDC B:18 ~ 36VDC C:36~72VDC  |              |              |              |           |              |              |           |           |
|                 | EFFICIENCY(Typ.)   | 68%  | 76%          | 75%          | 72%          | 76%       | 79%          | 70%          | 77%       | 78%       |
|                 | DC CURRENT(Typ.)   | 1.9A/12VDC 0.9A/24VDC 0.45A/48VDC  |              |              |              |           |              |              |           |           |
| PROTECTION      | OVER LOAD  | 105 ~160% rated output power   |              |              |              |           |              |              |           |           |
|                 |  | Protection type : Hiccup mode, recovers automatically after fault condition is removed   |              |              |              |           |              |              |           |           |
|                 | OVER VOLTAGE   | 5.75 ~ 6.75V   |              |              | 13.8~ 16.2V  |           | 27.6 ~ 32.4V |              |           |           |
|                 |  | Protection type : Shut down o/p voltage, re-power on to recover  |              |              |              |           |              |              |           |           |
| ENVIRONMENT     | WORKING TEMP.  | -10 ~ +60 $^\circ\mathrm{C}$ (Refer to output load derating curve)   |              |              |              |           |              |              |           |           |
|                 | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing   |              |              |              |           |              |              |           |           |
|                 | STORAGE TEMP., HUMIDITY  | -20 ~ +85℃, 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 | WITHSTAND VOLTAGE  | I/P-O/P:2KVAC I/P-FG:1KVAC 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 t   | o EN55022(Cl | ISPR22) CLAS |              |           |              |              |           |           |
|                 | EMS IMMUNITY   | Compliance to EN61000-4-2,3,4,6,8;ENV50204,EN55024,light industry level,criteria A   |              |              |              |           |              |              |           |           |
| OTHERS          | DIMENSION  | 78*51*28mm (L*W*H)   |              |              |              |           |              |              |           |           |
|                 | PACKING  | 0.18kg,60 PCS/11.8kg   |              |              |              |           |              |              |           |           |
| NOTE            | <ol> <li>Ripple &amp; noise are measured</li> <li>Tolerance : includes set up tol</li> </ol> | mentioned are measured at normal input, rated load and 25°C of ambient temperature.<br>at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>lerance, line regulation and load regulation.<br>ed a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets |              |              |              |           |              |              |           |           |



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