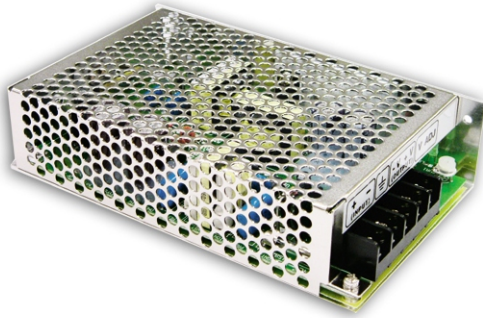




50W Single Output DC-DC Converter

SD-50 series



- 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
- Low cost
- High reliability
- 2 years warranty



GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

SPECIFICATION



| MODEL | | SD-50A-5 | SD-50B-5 | SD-50C-5 | SD-50A-12 | SD-50B-12 | SD-50C-12 | SD-50A-24 | SD-50B-24 | SD-50C-24 |
|---------------------------|--|---|----------|--------------|---------------------|--------------|-----------|-----------------------|-----------|-----------|
| OUTPUT | DC VOLTAGE | 5V | | | 12V | | | 24V | | |
| | RATED CURRENT | 10A | | | 4.2A | | | 2.1A | | |
| | CURRENT RANGE | 0 ~ 10A | | | 0 ~ 4.2A | | | 0 ~ 2.1A | | |
| | RATED POWER | 50W | | | 50.4W | | | 50.4W | | |
| | 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, HOLD UP TIME | 2.5s, 50ms, ----- at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE | A:9.2 ~ 18VDC | | B:19 ~ 36VDC | | C:36 ~ 72VDC | | | | |
| | EFFICIENCY (Typ.) | 70% | 73% | 76% | 72% | 75% | 78% | 74% | 80% | 83% |
| | DC CURRENT | 7A/12V | 3A/24V | 1.5A/48V | 7A/12V | 3A/24V | 1.5A/48V | 7A/12V | 3A/24V | 1.5A/48V |
| PROTECTION | OVERLOAD | 105 ~ 150% rated output power 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 | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to "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 (Note 4) | SAFETY STANDARDS | EAC TP TC 004 approved, Design refer to LVD, AS/NZS 62368.1 | | | | | | | | |
| | 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 | | | | | | | | |
| | EMC EMISSION | Compliance to BS EN/EN55032 (CISPR32) Class B, EAC TP TC 020 | | | | | | | | |
| OTHERS | EMC IMMUNITY | Compliance to BS EN/EN61000-4-2,3,4,6,8, BS EN/EN55024, heavy industry level, EAC TP TC 020 | | | | | | | | |
| | MTBF | 3293.1K hrs min. Telcordia SR-332 (Bellcore) ; 512.8K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 159*97*38mm (L*W*H) | | | | | | | | |
| NOTE | PACKING | 0.43Kg; 24pcs/11.35Kg/0.83CUFT | | | | | | | | |
| | <p>1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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 http://www.meanwell.com)</p> <p>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).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p> | | | | | | | | | |