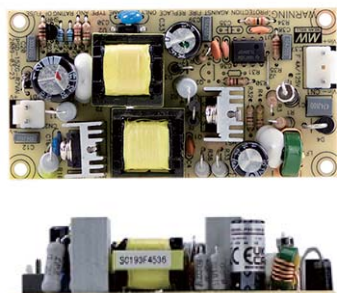




15W DC-DC Single Output Switching Power Supply

PSD-15 series



■ Features :

- Protections: Short circuit/Over load /Over voltage/ Polarity
- Cooling by free air convection
- 100% full load burn-in test
- Low cost
- High reliability
- 2 year warranty

User's Manual



■ GTIN CODE

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

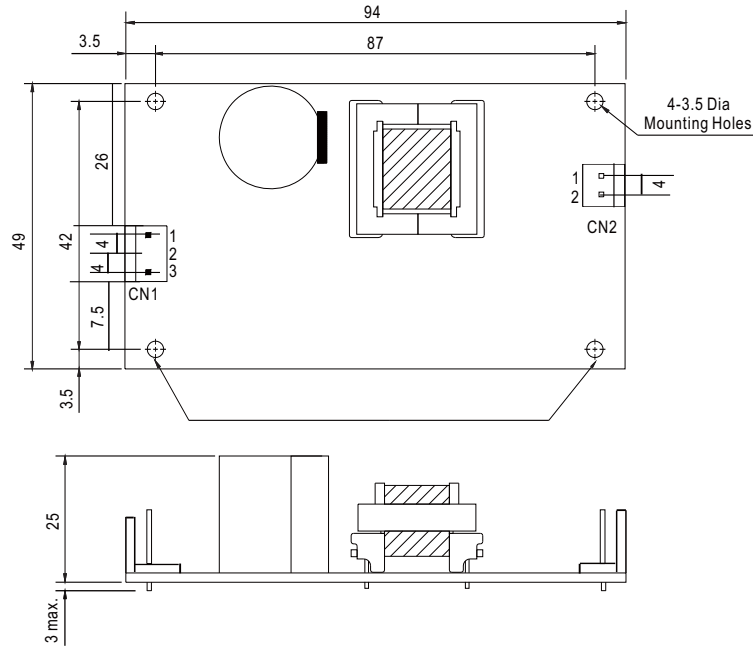


SPECIFICATION

| MODEL | PSD-15A-05 | PSD-15B-05 | PSD-15C-05 | PSD-15A-12 | PSD-15B-12 | PSD-15C-12 | PSD-15A-24 | PSD-15B-24 | PSD-15C-24 | |
|---------------------------|--|---|------------|------------|-------------|------------|------------|--------------|------------|-----|
| OUTPUT | DC VOLTAGE | 5V | | | 12V | | | 24V | | |
| | RATED CURRENT | 3A | | | 1.25A | | | 0.6A | | |
| | CURRENT RANGE | 0 ~ 3A | | | 0 ~ 1.25A | | | 0 ~ 0.6A | | |
| | RATED POWER | 15W | | | 15W | | | 14.4W | | |
| | RIPPLE & NOISE (max.) Note.2 | 50mVp-p | | | 100mVp-p | | | 100mVp-p | | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | | | ±2.0% | | | ±2.0% | | |
| | LINE REGULATION | ±1.0% | | | ±1.0% | | | ±0.5% | | |
| | LOAD REGULATION | ±1.0% | | | ±1.0% | | | ±0.5% | | |
| SETUP, RISE, HOLD UP TIME | 2.5s, 25ms, ----/12VDC/24VDC/48VDC at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE | A: 9.2 ~18VDC (12VDC) B:18 ~ 36VDC (24VDC) C:36~72VDC(48VDC) | | | | | | | | |
| | EFFICIENCY(Typ.) | 74% | 78% | 78% | 67% | 78% | 78% | 72% | 78% | 79% |
| | DC CURRENT(Typ.) | 1.9A/12VDC 0.9A/24VDC 0.45A/48VDC | | | | | | | | |
| PROTECTION | OVER LOAD | 105% ~150% rated output power Protection type : hiccup mode ,recovery automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 5.75 ~ 6.75V | | | 13.8~ 16.2V | | | 27.6 ~ 32.4V | | |
| | | Protection type : Shut off o/p voltage, clamping by zener diode | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to "Derating Curve") | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 95% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.05%/°C (0 ~ 50°C) | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | EAC TP TC 004 approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:2.0KVAC | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P:100M Ohms/500VDC / 25°C/ 70% RH | | | | | | | | |
| | EMI CONDUCTION&RADIATION | Compliance to BS EN/EN55032(CISPR32) CLASS B, EAC TP TC 020 | | | | | | | | |
| | EMS IMMUNITY | Compliance to BS EN/EN61000-4-2,3,4,6,8,BS EN/EN55035, BS EN/EN61000-6-1,light industry level,EAC TP TC 020 | | | | | | | | |
| OTHERS | MTBF | 7598.3K hrs min. Telcordia SR-332 (Bellcore) ; 740.4K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 94*49*25mm (L*W*H) | | | | | | | | |
| | PACKING | 81g;120pcs/10.72Kg/0.9CUFT | | | | | | | | |
| NOTE | <p>1.All parameters NOT specially mentioned are measured at normal input,rated load and 25°C of ambient temperature.</p> <p>2.Ripple & noise are measured at 20 MHz of bandwidth by using a 12inch twisted pair-wire terminated with a 0.1 μ F & 47 μ F 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 230mm*230mm 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 https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf)</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> | | | | | | | | | |

Mechanical Specification

(Unit: mm, tolerance ± 1 mm)



DC Input Connector (CN1) : JST B3P-VH or equivalent

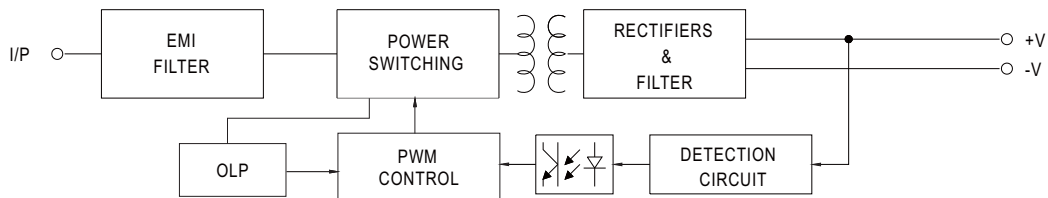
| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | -V | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | No Pin | | |
| 3 | +V | | |

DC Output Connector (CN2) : JST B2P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | -V | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | +V | | |

Block Diagram

fosc : 100KHz



Output Derating

