



SUNPOWER TECHNOLOGY CORP.
 16F.-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)
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SPS-G050-Dx Series

50W, Dual Output



99 x 82 x 35 mm
 3.90 x 3.23 x 1.38 inch

Features:

- * Power ON with LED indicator
- * Built in EMI filter, low ripple noise
- * Over voltage protection : Shutdown and latch off
- * Over load & short circuit protection : Hiccup mode
- * 100% full load burn-in test
- * -20°C~70°C Operating temperature
- * UL, cUL, TUV, CB, CE approved
- * 3 years warranty

Specification:

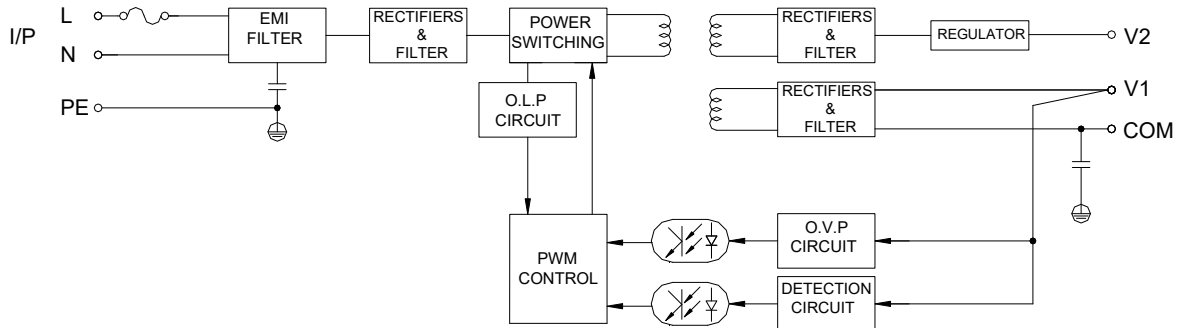
| | | | | | | | | | |
|--------------------|---|--|-------|-------------|-------|-------------|-------|-------------|-------|
| INPUT | Voltage | 88V ~ 264VAC universal full range or 125V ~ 375VDC. | | | | | | | |
| | Frequency | 47 ----- 63 Hz | | | | | | | |
| | Current | <1.3A@100V AC input, full load condition | | | | | | | |
| | Inrush Current (TYP.) | 30A@115V , 50A@230V AC input, Cold start at 25°C ambient | | | | | | | |
| | Leakage Current | <0.75mA@264V AC input | | | | | | | |
| OUTPUT | MODEL No. | SPS-G050-D1 | | SPS-G050-D2 | | SPS-G050-D8 | | SPS-G050-D9 | |
| | Output | V1 | V2 | V1 | V2 | V1 | V2 | V1 | V2 |
| | Voltage | 5V | 12V | 5V | 24V | 12V | -12V | 15V | -15V |
| | Min Load | 0.5A | 0A | 0.5A | 0A | 0.3A | 0A | 0.3A | 0A |
| | Max Load | 6A | 3A | 6A | 2A | 4.2A | 2.1 | 3.4A | 2A |
| | Output Tolerance ② | ± 3% | ± 7% | ± 3% | ± 7% | ± 2% | ± 5% | ± 2% | ± 5% |
| | Ripple Noise MAX. ③ | 70mV | 120mV | 70mV | 200mV | 120mV | 120mV | 150mV | 150mV |
| | Efficiency (TYP.) | 79% | | 79% | | 82% | | 83% | |
| Output MAX. | 51W | | 52W | | 50W | | 51W | | |
| PROTECTION | Over Voltage | 5.8 ~ 7.0V | ---- | 5.8 ~ 7.0V | ---- | 13.8~16.8V | ---- | 17.3~21.0V | ---- |
| | | Shutdown and latch off, recover after re-start up. | | | | | | | |
| | Over Load & Short Circuit | When power supply over 105%~ 150% max load or short circuit acted, power supply will go into hiccup mode and recover automatically after the fault is removed. | | | | | | | |
| ELEC. CHAR. | Rise time | <30mS | | | | | | | |
| | Hold up time | >60mS@230V, full load condition | | | | | | | |
| | Setup time | <1 Sec@100 ~ 240V AC | | | | | | | |
| ENVIRONMENT | Temperature ④ | Operating: -20 ~ +70°C ; De-rating: 50 ~ 70°C : 2.5%/°C ; Storage: -40 ~ +85°C | | | | | | | |
| | Humidity | Operating: 20% ~ 90% RH (non condensing) ; Storage: 10% ~ 95% RH (non condensing) | | | | | | | |
| | Altitude | 6562 ft (≒ 2000 m) operating | | | | | | | |
| SAFETY | Withstand voltage | I/P-O/P:3KVAC, I/P-PE:1.5KVAC, O/P-PE:0.5KVAC, 1minute | | | | | | | |
| | Isolation resistance | I/P-O/P, I/P-PE, O/P-PE > 100MΩ/500VDC at 25°C / 70% RH | | | | | | | |
| | Safety standard | UL 60950-1 2 nd , CSA C22.2 No. 60950-1-07 2 nd , TUV EN 60950-1:2006+A11+A1+A12+A2, IEC 60950-1:2005+A1+A2, approved | | | | | | | |
| EMC | EMI | EN 55032 CLASS B, FCC CFR 47 PART 15 CLASS B, CNS 13438 CLASS B. | | | | | | | |
| | EMS | Compliance to EN61000-3-2 CLASS A, EN61000-3-3 EN 55024 : EN 61000-4-2,3,4,5,6,8,11 | | | | | | | |
| OTHERS | Cooling | Natural cooling. | | | | | | | |
| | M.T.B.F. | 299K hours | | | | | | | |
| | Terminal pitch | 7P / 8.25mm with plastic cover, 90 deg terminal optional (with MOQ) | | | | | | | |
| | Packing | N.W.: 0.39Kg / pc ; 46pcs / 1.22 CUFT/ 1 CTN | | | | | | | |
| NOTE | ① All measurements which not mentioned are based on 230VAC input, output Max at ambient 25°C / 70%RH ② Output tolerance included set up voltage, line regulation and load regulation. The regulation is measured between 20%-80% max load of each output, Total output must under output Max . ③ Ripple & noise are measured at 100~254VAC input with 10~50°C condition and 20MHz of bandwidth by using a 10" ~ 15" twisted pair-wire terminated with a 0.1uF & a 47uF parallel capacitor. ④ The operating temperature shall follow the de-rating curve in spec The output load may be requested for decreasing as de-rating curve in spec when low input voltage is under 100VAC. ⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives. | | | | | | | | |



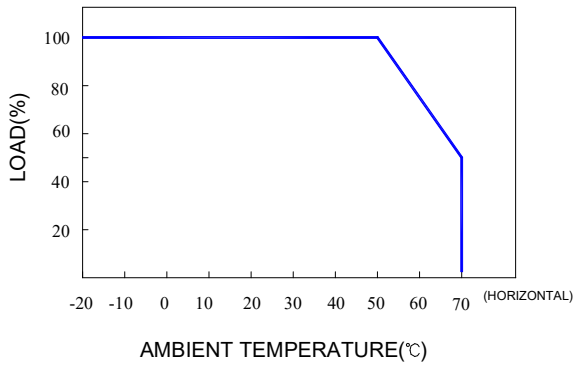
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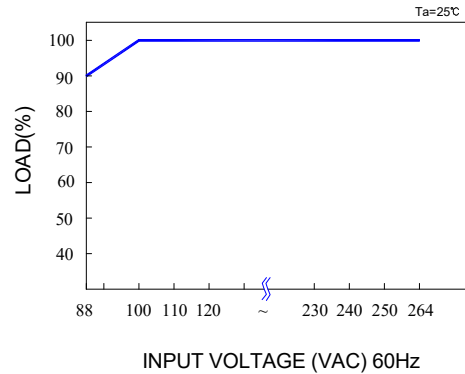
Block Diagram : UD3



De-rating Curve :

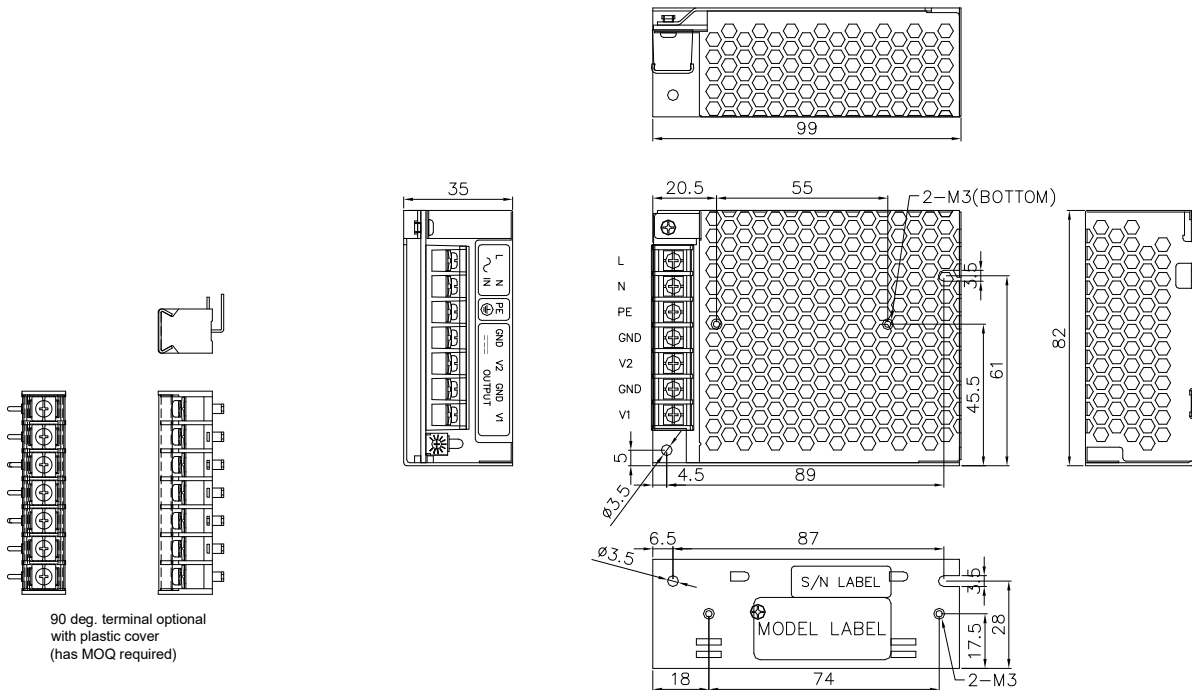


Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)



90 deg. terminal optional
 with plastic cover
 (has MOQ required)

Terminal Pin. No Assignment :

| 7P, PITCH 8.25mm WITH PC COVER | | | | | | | |
|--------------------------------|---|---|----|-----|----|-----|----|
| MODEL No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| SPS-G050-Dx | L | N | PE | GND | V2 | GND | V1 |