



SUNPOWER TECHNOLOGY CORP.
16F-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)
TEL: 886-2-8226-3100 FAX: 886-2-8226-3111
<http://www.sunpower.com.tw>
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SDS-050M-xx Series

50W, Single Output
DC-DC Converter



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



Features:

- * DC Input 19V ~ 72V (TYPICAL 48V)
- * Input protection: 5A/250V fuses
- * Inrush current limitation soft start function
- * Input & output isolation
- * Over voltage, over load & short circuit protection
- * Output voltage $\pm 10\%$ adjustment
- * 100% full load burn-in test
- * Meet LVD standard
- * 2 years warranty

Specification:

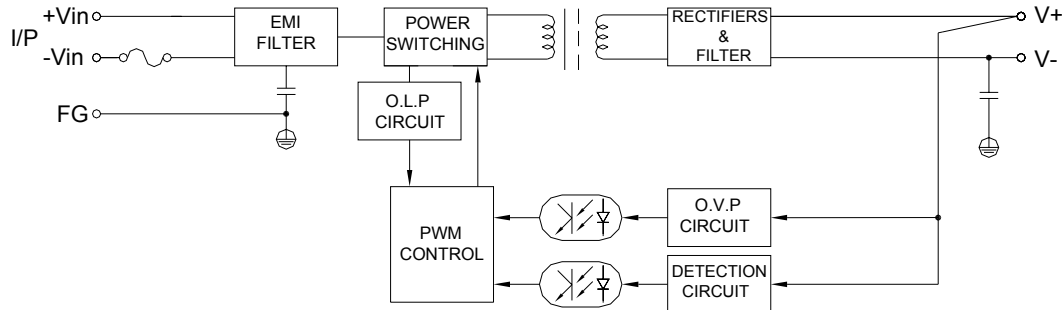
INPUT	Voltage	19V ~ 72V DC (TYPICAL 48V)			
	Current	<3.6A@19 V DC input full load condition			
OUTPUT	Voltage	5V	12V	24V	48V
	Min Load	0A	0A	0A	0A
	Max Load	9A	4.2A	2.1A	1.1A
	Output Tolerance ②	±2%	±1%	±1%	±1%
	Ripple Noise MAX. ③	70mV	120mV	150mV	240mV
	Efficiency (TYP)	77%	82%	84%	86%
	Output MAX.	45W	50W	50W	53W
PROTECTION	Over Voltage	5.8~7.0V	13.8~16.8V	27.6~33.6V	55.2~67.2V
	OverLoad & ShortCircuit	Shutdown and latch off, recover after re-start up. 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			
ENVIRONMENT	Temperature ④	Operating: -20 ~ +70℃ ; De-rating: 45 ~ 70℃: 2.5%/℃ ; Storage: -40 ~ +85℃			
	Humidity	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing)			
SAFETY	Withstand voltage	I/P-O/P:2.0KVAC, I/P-FG:1.5KVAC, O/P-FG:0.5KVAC, 1minute			
	Isolation resistance	I/P-O/P, I/P-FG, O/P-FG > 100MΩ/500VDC at 25℃ / 70% RH			
EMC	EMI	EN / BS EN 55032 CLASS B 、 FCC CFR 47 PART 15 CLASS B 、 CNS 13438 CLASS B.			
	EMS	EN / BS EN 55035:2017+A11:2020 EN / BS EN 61000-4-2,3,4,5,6,8 ; ENV 50204			
OTHERS	Cooling	Natural cooling			
	M.T.B.F.	417 K hours			
	Dimension	99 x 82 x 35 mm (L*W*H)			
	Packing	N.W.:0.34Kg / 1pc; 46pcs / 1.22 CUFT / 1 CTN			
NOTE	① All measurements which not mentioned are based on 48VDC input, output Max at ambient 25℃ / 70%RH ② Output tolerance included set up voltage, line regulation and load regulation. ③ Ripple & noise are measured at 10~50℃ 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 ⑤ The power supply is considered a component of end-equipment. The end-equipment must be re-confirmed whether comply with EMC directives.				



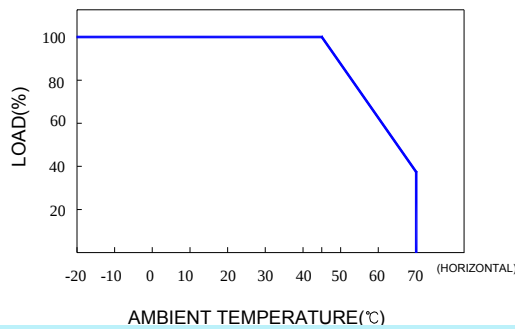
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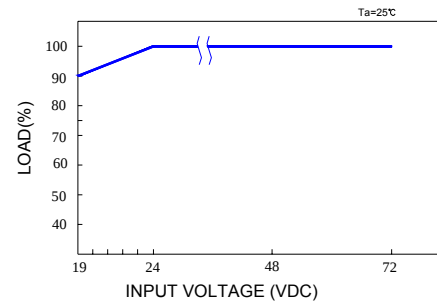
Block Diagram : DS19



De-rating Curve :

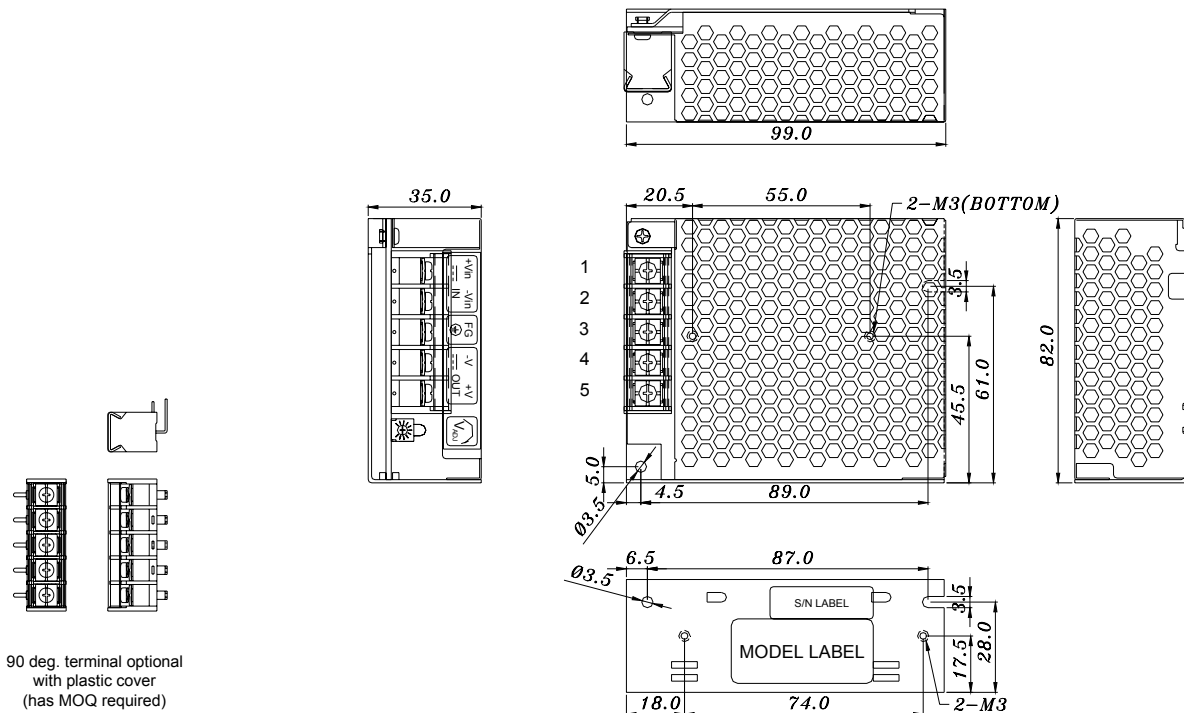


Output De-rating Vs Input Voltage :



Dimension:

(Unit: mm)



NOTES:

MODEL No.	1	2	3	4	5
SDS-050M-xx	+Vin	-Vin	FG	-V	+V



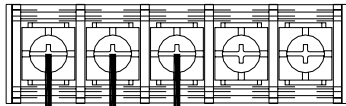
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Input Voltage Connection:

A TPYE : +48V Input

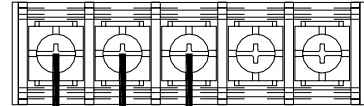
+ Vin - Vin  - V + V



+48V 0V FG

B TPYE : -48V Input

+ Vin - Vin  - V + V



0V -48V FG