



SDN-150B/C-xx Series

150W, Single Output

24V / 48V DC Input

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

E-mail: sunpower@sunpower.com.tw



198 x 95 x 38 mm
7.8 x 3.74 x 1.50 inch



Features:

- * Power ON with LED indicator
- * Input and output isolation
- * Non min. load requirement
- * Input polarity reverse protection
- * Input under voltage protection
- * Natural Cooling
- * Over voltage, over load & short circuit protection
- * Output voltage $\pm 10\%$ adjustment
- * 100% full load burn-in test
- * Meet LVD standard
- * 3 years warranty

Specification:

INPUT	Model NO.		SDN-150B-xx Ser.		SDN-150C-xx Ser.	
	Voltage		18 ~ 36V DC (Typical 24V)		36 ~ 72V DC (Typical 48V)	
	Current		<12A@18VDC		<6A@36VDC	
	Protection		Fuse , 15A/250V		Fuse , 7A/250V	
OUTPUT	Voltage		5V	12V	24V	48V
	Min Load		0A	0A	0A	0A
	Max Load		25A	12.5A	6.3A	3.2A
	Output Tolerance ②		$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	Ripple Noise MAX. ③		100mV	150mV	200mV	300mV
	Efficiency (TYP.)	SDN-150B	79%	84%	84%	85%
		SDN-150C	85%	90%	90%	91%
PROTECTION	Output MAX.		125W	150W	151W	154W
	Over Voltage		5.8~7.0V	13.8~16.8V	27.6~33.6V	55.2~67.2V
			Shutdown and latch off, recover after re-start up.			
	Over Load & ShortCircuit		When power supply over 105%~ 150% max load or short circuit acted, power supply will be constant current limiting and recover automatically after the fault is removed.			
ELEC. CHAR.	Input Voltage	SDN-150B	Under voltage shut down: < 16.0V			
		SDN-150C	Under voltage shut down: < 32.0V			
ENVIRONMENT	Temperature ④		Operating: -20 ~ 70°C ; Storage: -40 ~ +85°C SDN-150B-xx : De-rating: 45 ~ 70°C: 2.5%/°C ; SDN-150C-xx : De-rating: 50 ~ 70°C: 2.5%/°C			
SAFETY	Humidity		Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing)			
	Withstand voltage		I/P-O/P:4.0KVDC, I/P-FG:2.5KVDC, O/P-FG:0.7KVDC, 1minute			
EMC	Isolation resistance		I/P-O/P, I/P-FG, O/P-FG > 100MΩ/500VDC at 25°C / 70% RH			
	EMI		EN 55032 CLASS B 、FCC CFR 47 PART 15 CLASS B 、CNS 13438 CLASS B.			
OTHERS	EMS		EN 55024 : EN 61000-4-2,3,4,5,6,8 ; ENV 50204			
	Cooling		Natural Cooling.			
	M.T.B.F.		217.5 K hours			
	Dimension		198 x 95 x 38 mm (L*W*H)			
NOTE	Packing		N.W.: 0.576Kg / 1pc; 24pcs/ 1.20 CUFT / 1 CTN			
			① All measurements which not mentioned are based on 24V/48VDC input, output Max at ambient 25°C / 70%RH ② Output tolerance included set up voltage, line regulation and load regulation. ③ Ripple & noise are measured at 21~36V / 42~72VDC input with 10~50°C condition and 20MHz of bandwidth by terminated using a 10" ~ 15" twisted pair-wire 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. ⑥ The ambient temperature should be de-rating by 5°C/1000m, when operating altitude higher than 2000m (6500 ft)			



SDN-150B/C-xx Series

SUNPOWER TECHNOLOGY CORP.

16F-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)

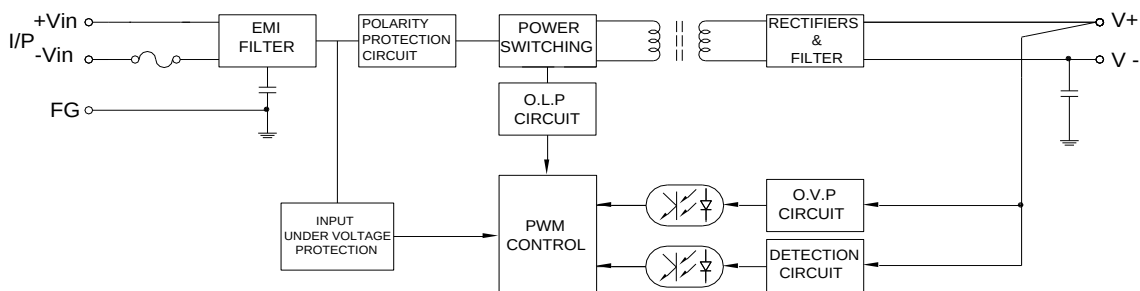
TEL: 886-2-8226-3100

FAX: 886-2-8226-3111

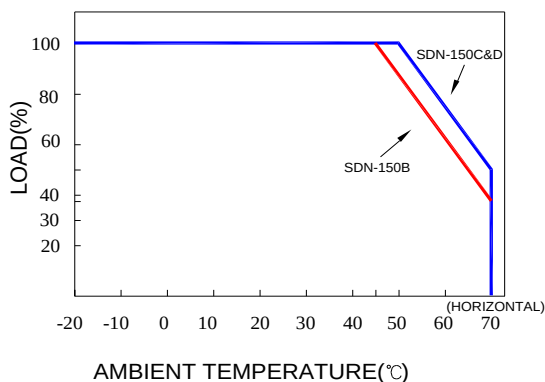
http://www.sunpower.com.tw

E-mail: sunpower@sunpower.com.tw

Block Diagram : DS51

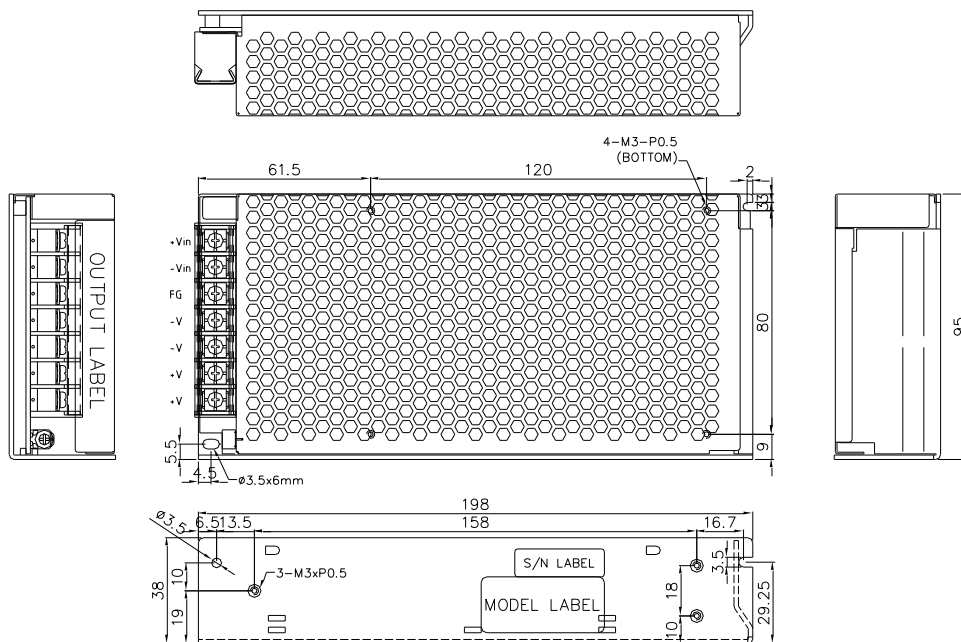


De-rating Curve : E2-5



Dimension:

(Unit: mm)



NOTES:

TERMINAL BLOCK: 7P, PITCH 9.5mm with pc cover

MODEL No.	1	2	3	4	5	6	7
SDN-150B/C-xx	+Vin	-Vin	FG	-V	-V	+V	+V



SDN-150D-xx Series

150W, Single Output

96V DC Input

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

E-mail: sunpower@sunpower.com.tw



198 x 95 x 38 mm

7.8 x 3.74 x 1.50 inch

Features:

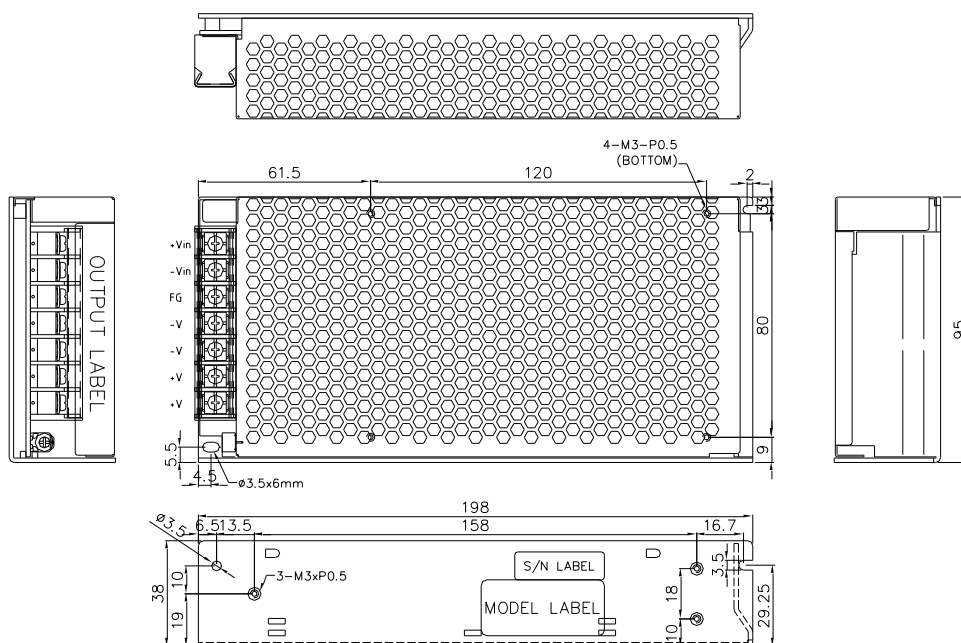
- * Power ON with LED indicator
- * Input and output isolation
- * Non min. load requirement
- * Input polarity reverse protection
- * Input under voltage protection
- * Natural Cooling
- * Over voltage, over load & short circuit protection
- * Output voltage $\pm 10\%$ adjustment
- * 100% full load burn-in test
- * Meet LVD standard
- * 3 years warranty

Specification:

INPUT	Model NO.	SDN-150D-xx Ser.			
	Voltage	72 ~ 144V DC (Typical 96V)			
	Current	<3.0A @ 72VDC			
	Protection	Fuse , 4A/250V			
OUTPUT	Voltage	5V	12V	24V	48V
	Min Load	0A	0A	0A	0A
	Max Load	25A	12.5A	6.3A	3.2A
	Output Tolerance ②	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	Ripple Noise MAX. ③	100mV	150mV	200mV	300mV
	Efficiency (TYP.)	85%	90%	90%	91%
	Output MAX.	125W	150W	151W	154W
PROTECTION	Over Voltage	5.8~7.0V	13.8~16.8V	27.6~33.6V	55.2~67.2V
		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 be constant current limiting and recover automatically after the fault is removed.			
ELEC. CHAR.	Input Voltage	Under voltage shut down: < 66.0V			
ENVIRONMENT	Rise time	< 50mS			
	Temperature ④	Operating: -20 ~ 70°C ; Storage: -40 ~ +85°C , De-rating: 50 ~ 70°C : 2.5%/°C			
SAFETY	Humidity	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing)			
	Withstand voltage	I/P-O/P:4.0KVDC, I/P-FG:2.5KVDC, O/P-FG:0.7KVDC, 1minute			
EMC	Isolation resistance	I/P-O/P, I/P-FG, O/P-FG > 100M Ω /500VDC at 25°C / 70% RH			
	EMI	EN 55032 CLASS B 、FCC CFR 47 PART 15 CLASS B 、CNS 13438 CLASS B.			
OTHERS	EMS	EN 55024 : EN 61000-4-2,3,4,5,6,8 ; ENV 50204			
	Cooling	Natural Cooling.			
	M.T.B.F.	217.5 K hours			
	Dimension	198 x 95 x 38 mm (L*W*H)			
NOTE	Packing	N.W.: 0.576Kg / 1pc; 24pcs/ 1.20 CUFT / 1 CTN			
	①	All measurements which not mentioned are based on 96VDC input, output Max at ambient 25°C / 70%RH			
	②	Output tolerance included set up voltage, line regulation and load regulation.			
	③	Ripple & noise are measured at 82~144VDC input with 10~50°C condition and 20MHz of bandwidth by terminated using a 10" ~15" twisted pair-wire 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.			
	⑥	The ambient temperature should be de-rating by 5°C/1000m, when operating altitude higher than 2000m (6500 ft)			

Ambient Temperature (°C)	SDN-150C&D Load (%)	SDN-150B Load (%)
-20	100	100
0	100	100
20	100	100
40	100	100
45	100	100
50	100	90
60	75	65
70	50	40

(Unit: mm)



MODEL No.	1	2	3	4	5	6	7
SDN-150D-xx	+Vin	-Vin	FG	-V	-V	+V	+V