



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

# SDS-100L-xx Series

100W, Single Output  
 DC-DC Converter



159 x 95 x 38 mm  
 6.26 x 3.74 x 1.50 inch



## Features:

- \* DC Input 9.5V ~ 36V (TYPICAL 24V)
- \* Input protection: 15A/250V fuses
- \* Inrush current limitation soft start function
- \* Input & output isolation
- \* Input polarity reverse protection
- \* Over voltage, over load & short circuit protection
- \* Output voltage  $\pm 10\%$  adjustment
- \* 100% full load burn-in test
- \*  $-20^{\circ}\text{C}$  to  $70^{\circ}\text{C}$  operating temperature
- \* Meet LVD standard
- \* 2 years warranty

## Specification:

INPUT	<b>Voltage</b>	DC 9.5V ~36V (TYPICAL 24V)				
	<b>Current</b>	9A max at 15V DC input, full load condition				
OUTPUT	<b>Voltage</b>	<b>5V</b>	<b>12V</b>	<b>24V</b>	<b>36V</b>	<b>48V</b>
	<b>Min Load</b>	0A	0A	0A	0A	0A
	<b>Max Load</b>	16A	8.4A	4.2A	2.8A	2.1A
	<b>Output Tolerance</b> ②	$\pm 2\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	<b>Ripple Noise MAX.</b> ③	70mV	120mV	200mV	240mV	240mV
	<b>Efficiency (TYP)</b>	76%	80%	80%	82%	83%
PROTECTION	<b>Output MAX.</b>	80W	101W	101W	101W	101W
	<b>Over Voltage</b>	5.8~7.0V	13.8~16.8V	27.6~33.6V	41.4~50.4V	55.2~67.2V
		Shutdown and latch off, recover after re-start up.				
	<b>OverLoad &amp; Short Circuit</b>	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.	<b>Rise time</b>	<30mS				
ENVIRONMENT	<b>Temperature</b> ④	Operating: $-20 \sim +70^{\circ}\text{C}$ ; De-rating: $45 \sim 70^{\circ}\text{C}$ : $2.5\%/^{\circ}\text{C}$ ; Storage: $-40 \sim +85^{\circ}\text{C}$				
	<b>Humidity</b>	Operating: 20% ~ 90% RH (non condensing); Storage: 10% ~ 95% RH (non condensing)				
SAFETY	<b>Withstand voltage</b>	I/P-O/P:2.0KVAC, I/P-FG:1.5KVAC, O/P-FG:0.5KVAC, 1minute				
	<b>Isolation resistance</b>	I/P-O/P, I/P-FG, O/P-FG > 100M $\Omega$ /500VDC at $25^{\circ}\text{C}$ / 70% RH				
EMC	<b>EMI</b>	EN 55022 CLASS B、FCC CFR 47 PART 15 CLASS B、CNS 13438 CLASS B.				
	<b>EMS</b>	EN 55024 : EN 61000-4-2,3,4,5,6,8 ; ENV 50204				
OTHERS	<b>Cooling</b>	Natural cooling				
	<b>M.T.B.F.</b>	254 K hours				
	<b>Dimension</b>	159 x 95 x 38 mm (L*W*H)				
	<b>Packing</b>	N.W.: 0.69 Kg / 1pc; 24pcs / 1.20 CUFT / 1 CTN				

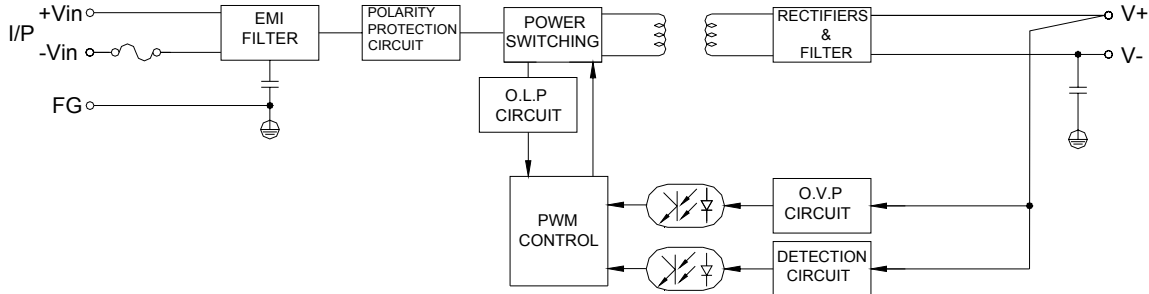
- NOTE
- ① All measurements which not mentioned are based on 24VDC input, **output Max** at ambient  $25^{\circ}\text{C}$  / 70%RH
  - ② Output tolerance included set up voltage, line regulation and load regulation.
  - ③ Ripple & noise are measured at  $10 \sim 50^{\circ}\text{C}$  condition and 20MHz of bandwidth by using a  $10'' \sim 15''$  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.



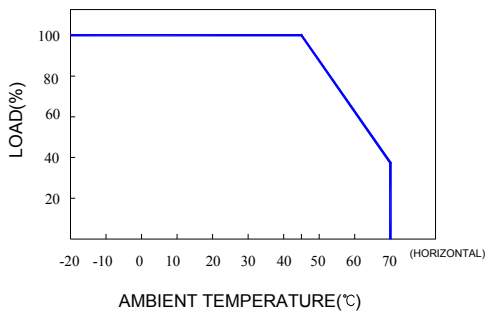
**SUNPOWER TECHNOLOGY CORP.**  
 16F.-1, No.150, Jian 1st Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)  
 TEL: 886-2-8226-3100 FAX: 886-2-8226-3111  
 http://www.sunpower.com.tw  
 E-mail: sunpower@sunpower.com.tw

# SDS-100L-xx Series

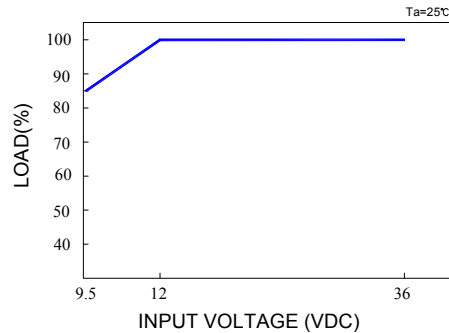
## Block Diagram : DS2



## De-rating Curve :

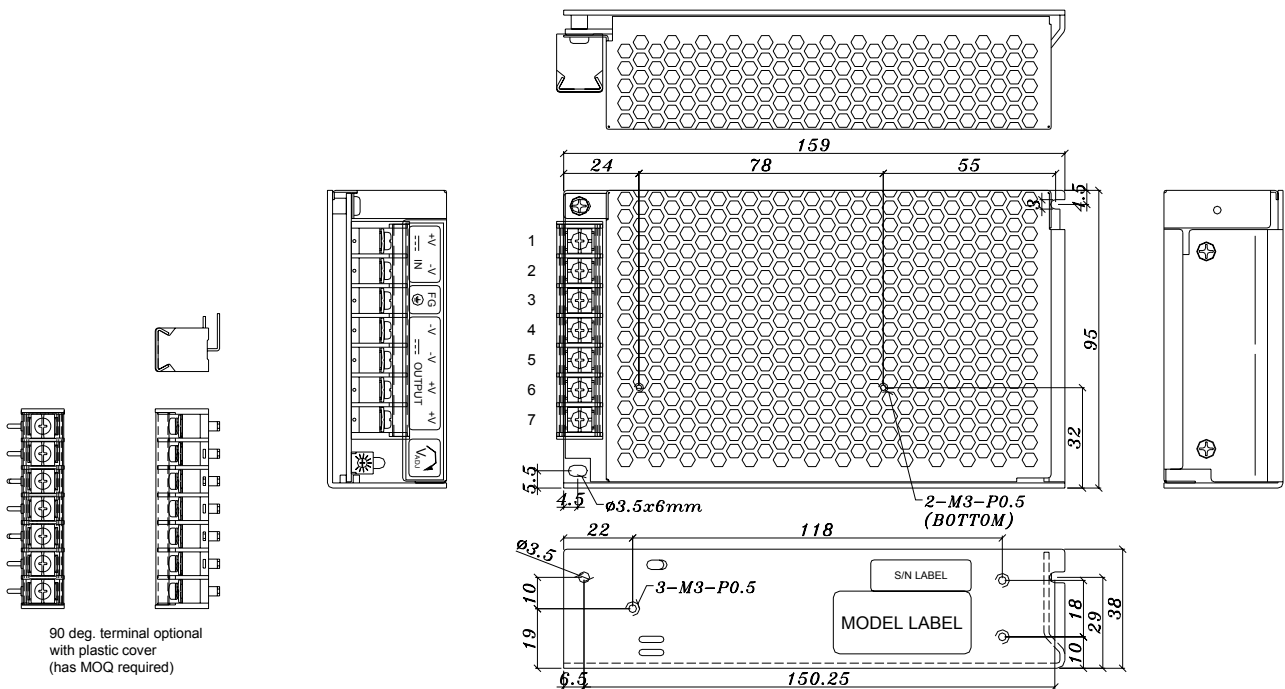


## Output De-rating Vs Input Voltage :



## Dimension:

(Unit: mm)



### NOTES:

TERMINAL BLOCK: 7P, PITCH 9.5mm WITH PC COVER							
MODEL No.	1	2	3	4	5	6	7
SDS-100L-xx	+Vin	-Vin	FG	-V	-V	+V	+V