



## 50W Single Output DC-DC Converter SSD-50 series

Features :

2:1 wide input range

Protections: Short circuit / Overload / Over voltage

1500VAC I/O isolation

Built-in EMI filter, low ripple noise

100% full load burn-in test

Fixed switching frequency at 83KHz

Low cost

High reliability

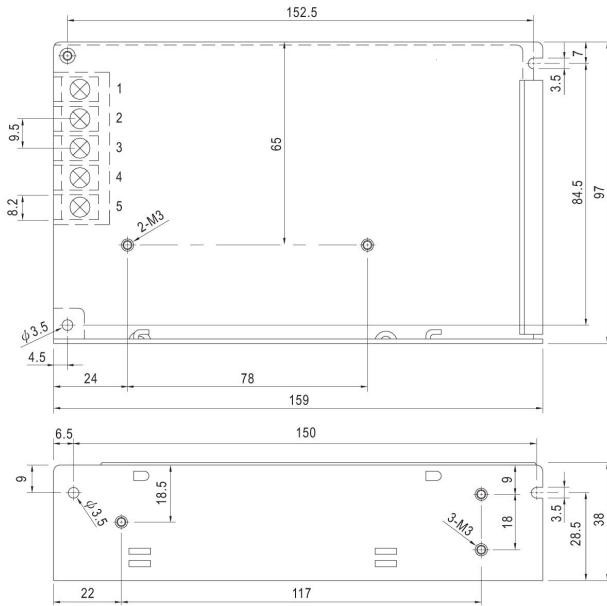


SPECIFICATION									
OUTPUT									
Model	SSD -50A	SSD -50B	SSD -50C	SSD -50A	SSD -50B	SSD -50C	SSD -50A	SSD -50B	SSD -50C
	-5	-5	-5	-12	-12	-12	-24	-24	-24
DC Voltage	5V			12V			24V		
Rated Current	10A			4.2A			2.1A		
Current Range	0~10A			0~4.2A			0~2.1A		
Rated Power	50W			50.4W			50.4W		
Ripple & Noise	100mVp-p			120mVp-p			150mVp-p		
Voltage Adj. Range	4.5~5.5VDC			11~16VDC			23~30VDC		
Voltage Tolerance	±2.0%			±1.0%			±1.0%		
Line Regulation	±0.5%			±0.3%			±0.2%		
Load Regulation	±0.5%			±0.3%			±0.2%		
Setup, Rise, Hold Up Time	2.5s,50ms,-----at full load								
INPUT									
Voltage Range	A:9.2~18VDC			B:19~36VDC			C:36~72VDC		
Efficiency	70%	73%	76%	72%	75%	78%	74%	80%	83%
DC Current	7A/12V			3A/24V			1.5A/48V		
PROTECTION									
Over Load	105~150% rated output power Protection type: Hiccup mode,recovers automatically after fault condition is removed								
Over Voltage	5.75~6.75V/10%load			16.8~20V/10%load			31.5~37.5V/10%load		

	Protection type: Hiccup mode,recovers automatically after fault condition is removed
<b>ENVIRONMENT</b>	
Working Temp.	-10~+60°C (Refer to "Derating Curve")
Working Humidity	20~90% RH non-condensing
Storage temp., Humidity	-20~+85°C ,10~95%RH
Temp. Coefficient	±0.03%/°C (0~50°C)
Vibration	10~500Hz,2G10min./1cycle,60min.each along X, Y,Z axes
<b>SAFETY &amp; EMC</b>	
Safety Standards	Design refer to LVD
Withstand Voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC /25°C /70%RH
EMC Emission	Compliance to EN55022(CISPR22)Class B
EMC Immunity	Compliance to EN61000-4-2,3,4,6,8, EN55024, heavy industry level, criteria A
<b>OTHERS</b>	
Dimension	159*97*38mm(L*W*H)
Weight	0.48Kg
Packing	24pcs/12.7Kg/0.75CUFT
<b>NOTE</b>	
<p>1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel 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. The final equipment must be re-confirmed that it still meets EMC directives.</p>	



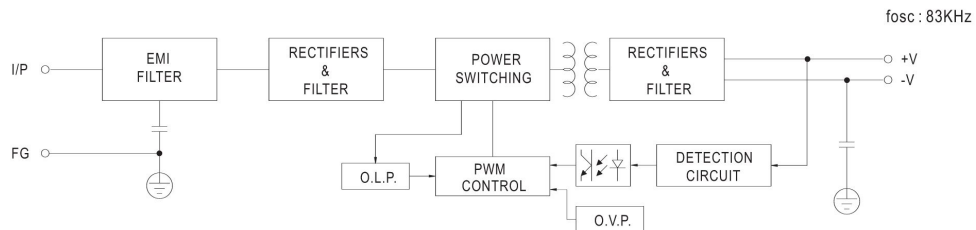
**Mechanical Specification**



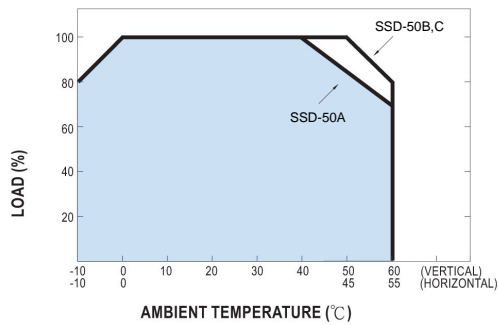
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	DC INPUT V+	4	DC OUTPUT -V
2	DC INPUT V-	5	DC OUTPUT +V
3	FG $\perp$		

**Block Diagram**



**Derating Curve**



**Static Characteristics (SD-50C-24V)**

