



100W Single Output DC-DC Converter SSD-100 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 83 KHz

24V and 48V input voltage design refer to LVD

Low cost High reliability



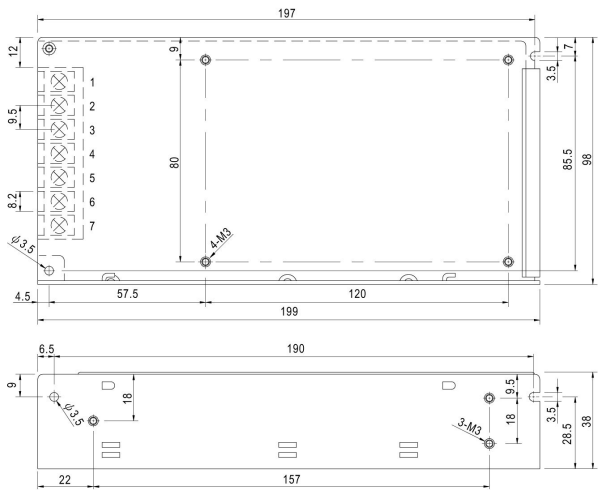
SPECIFICATION													
OUTPUT													
Model	SSD-100B-5	SSD-100C-5	SSD-100D-5	SSD-100B-12	SSD-100C-12	SSD-100D-12	SSD-100B-24	SSD-100C-24	SSD-100D-24	SSD-100B-48	SSD-100C-48	SSD-100D-48	
DC Voltage	5V			12V			24V			48V			
Rated Current	20A			8.5A			4.2A			2.1A			
Current Range	0~20A			0~8.5A			0~4.2A			0-2.1A			
Rated Power	100W			102W			100.8W			100.8W			
Ripple & Noise	100mVp-p			120mVp-p			150mVp-p			150mVp-p			
Voltage Adj. Range	4.5~5.5VDC			11~16VDC			23~30VDC			43.2-52.8VDC			
Voltage Tolerance	±2.0%			±1.0%			±1.0%			±1.0%			
Line Regulation	±0.5%			±0.3%			±0.2%			±0.2%			
Load Regulation	±0.5%			±0.3%			±0.2%			±0.2%			
Setup, Rise Time	2s,50ms(only D mode) at full load												
Hold Up Time	20ms(only D mode) at full load												
INPUT													
Voltage Range	B:19~36VDC C:36~72VDC D:72~144VDC or 85~132VAC												
Efficiency	74%	75%	76%	75%	77%	80%	78%	81%	83%	78%	81%	83%	
DC Current	4.8A/22.4A/4V	1.8A/9.8V/8V	4.8A/22.4A/6V	1.8A/9.8V/4V	4.8A/22.4A/8V	1.8A/9.8V/6V	4.8A/22.4A/4V	1.8A/9.8V/8V	4.8A/22.4A/6V	1.8A/9.8V/4V	4.8A/22.4A/8V	1.8A/9.8V/96V	
Inrush Current	D:18A/96VDC												
Leakage Current	<0.75mA/120VAC(SD-100D)												
PROTECTION													
Over Load	105~135% 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	60.2-79.2/10%load
	Protection type:Hiccup mode,recovers automatically after fault condition is removed			
ENVIRONMENT				
Working Temp.	-10~+60℃ (Refer to “Derating Curve”)			
Working Humidity	20~90%RH non-condensing			
Storage Temp.,Humidity	-20~+85℃,10~95%RH			
Temp.Coefficient	±0.03%/℃ (0~50℃)			
Vibration	10~500Hz,2G 10min./1cycle,60min.each along X, Y, Z axes			
SAFETY &EMC				
Safety Standards	IEC60950-1CB approved by TUV(for D type only)			
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℃ /70%RH			
EMC Emission	Compliance to EN55022(CISPR22) Class B			
EMC Immunity	Compliance to EN61000-4-2,3,4,6,8,light industry level,criteria A			
OTHERS				
Dimension	199*98*38mm(L*W*H)			
Weight	0.55Kg			
Packing	30pcs/16.5Kg			
NOTE				

1. All parameters NOT specially mentioned are measured at 24, 48, 96VDC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
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.



■ Mechanical Specification



Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1,2	INPUT ※	4,5	DC OUTPUT -V
3	FG ≡	6,7	DC OUTPUT +V

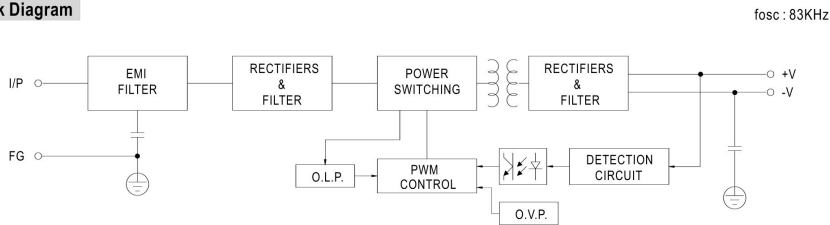
※ SSD-100B,C

Pin No.	Assignment
1	DC INPUT V+
2	DC INPUT V-

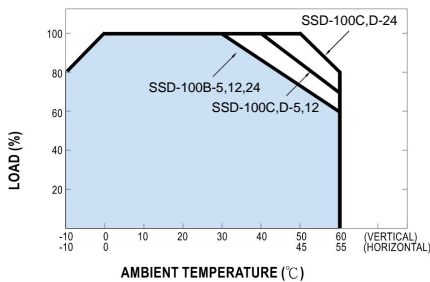
※ SSD-100D

Pin No.	Assignment
1,2	AC/DC INPUT

■ Block Diagram



■ Derating Curve



■ Static Characteristics SSD-100D-24V

