



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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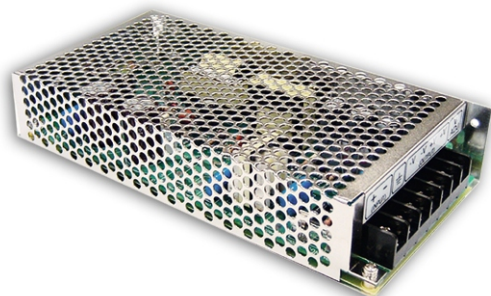
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100W Single Output DC-DC Converter

SD-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
- Low cost
- High reliability
- 2 years warranty

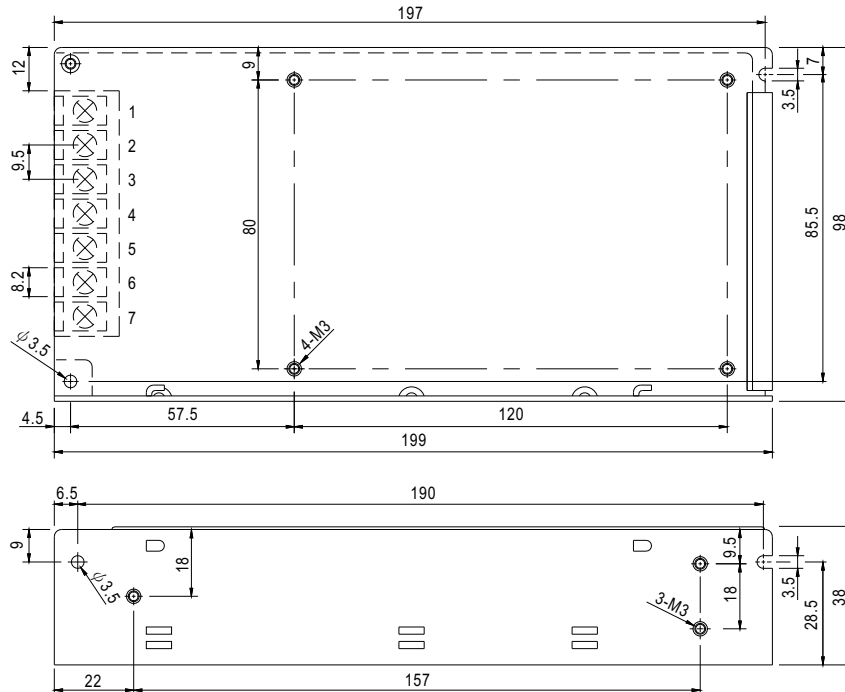
EAC CB (for D type only) **CE**

SPECIFICATION

MODEL		SD-100A-5	SD-100B-5	SD-100C-5	SD-100D-5	SD-100A-12	SD-100B-12	SD-100C-12	SD-100D-12	SD-100A-24	SD-100B-24	SD-100C-24	SD-100D-24
OUTPUT	DC VOLTAGE	5V				12V				24V			
	RATED CURRENT	18A	20A					8.5A				4.2A	
	CURRENT RANGE	0 ~ 18A		0 ~ 20A		0 ~ 8.5A				0 ~ 4.2A			
	RATED POWER	90W	100W					102W				100.8W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p				120mVp-p				150mVp-p			
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC				11 ~ 16VDC				23 ~ 30VDC			
	VOLTAGE TOLERANCE Note.3	±2.0%				±1.0%				±1.0%			
	LINE REGULATION	±0.5%				±0.3%				±0.2%			
	LOAD REGULATION	±0.5%				±0.3%				±0.2%			
	SETUP, RISE TIME	2s, 50ms(only D mode) at full load											
HOLD UP TIME (Typ.)	20ms(only D mode) at full load												
INPUT	VOLTAGE RANGE	A:9.5 ~ 18VDC		B:19 ~ 36VDC		C:36 ~ 72VDC		D:72 ~ 144VDC or 85 ~ 132VAC					
	EFFICIENCY (Typ.)	78%	74%	75%	76%	82%	75%	77%	80%	84%	78%	81%	83%
	DC CURRENT (Typ.)	9.7A/12V	4.8A/24V	2.4A/48V	1.8A/96V	10.4A/12V	4.8A/24V	2.4A/48V	1.8A/96V	10A/12V	4.8A/24V	2.4A/48V	1.8A/96V
	INRUSH CURRENT (Typ.)	D:18A/96VDC											
	LEAKAGE CURRENT	<0.75mA/120VAC(SD-100D)											
PROTECTION	OVERLOAD	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/5% load		31.5 ~ 37.5V/10% load	
ENVIRONMENT	WORKING TEMP.	-15 ~ +60°C(SD-100A), -10 ~ +60°C(SD-100B/C/D) (Refer to "Derating Curve")											
	WORKING HUMIDITY	20 ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH non-condensing											
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)											
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes											
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC60950-1 CB approved by TUV (for D type only), EAC TP TC 004 approved											
	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 EN55032 (CISPR32) Class B, EAC TP TC 020											
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8, light industry level, criteria A, EAC TP TC 020											
	MTBF	399.9K hrs min.(SD-100A)		356.7K hrs min.(SD-100B)		355.5K hrs min.(SD-100C)		341.9K Hrs min.(SD-100D)		MIL-HDBK-217F (25°C)			
	DIMENSION	199*98*38mm (L*W*H)											
	PACKING	0.65Kg; 20pcs/13.8Kg/0.8CUFT											
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 12,24,48,96VDC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). 												

■ Mechanical Specification

Case No. 902 Unit:mm



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

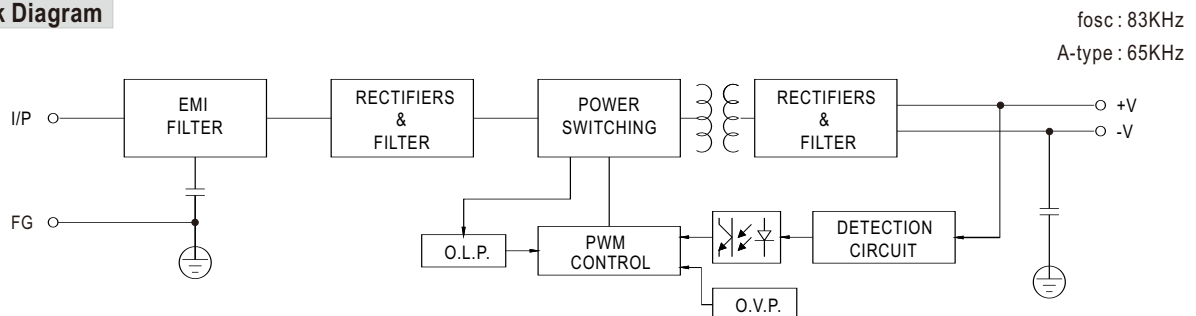
※ SD-100A,B,C

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

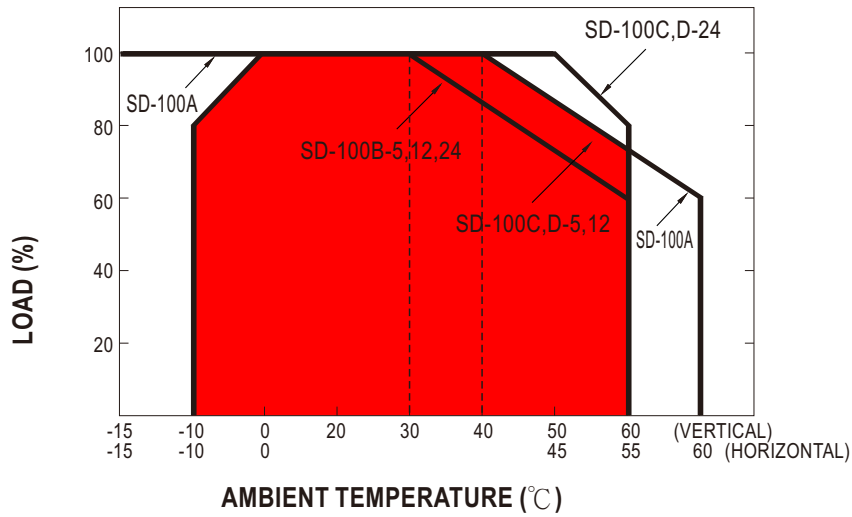
※ SD-100D

Pin No.	Assignment
1,2	AC/DC INPUT

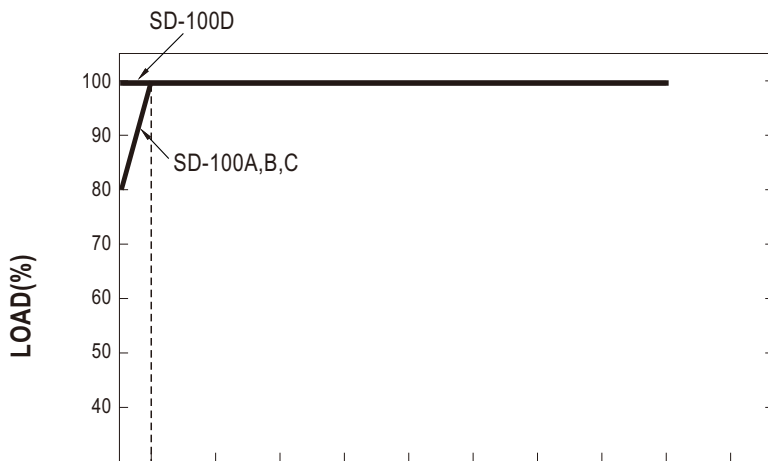
■ Block Diagram



■ Derating Curve



■ Output Derating VS Input Voltage



A:	9.5	10	11	12	13	14	15	16	17	18
B:	19	20	22	24	26	28	30	32	34	36
C:	36	38	44	48	52	56	60	64	68	72
D:	72	76	88	96	104	112	120	128	136	144