



150W Single Output DC-DC Converter

SD-150 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
- 24V and 48V input voltage design refer to LVD
- Low cost
- High reliability
- 2 years warranty



AS/NZS62368-1



BS EN/EN62368-1



TPTC004



IEC62368-1



(for D type only)



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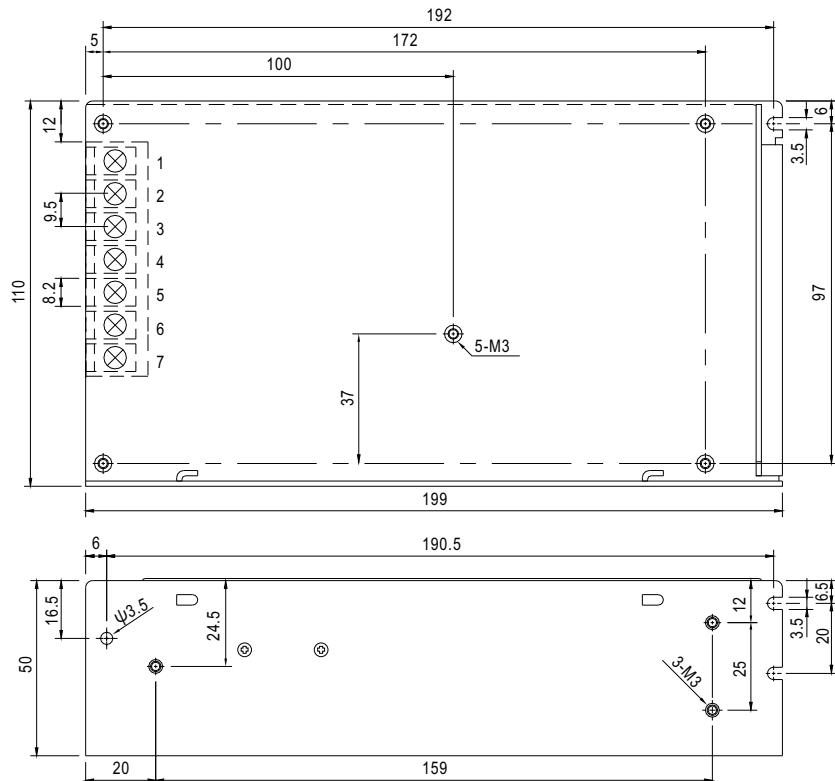
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SPECIFICATION

MODEL	SD-150B-12	SD-150C-12	SD-150D-12	SD-150B-24	SD-150C-24	SD-150D-24
OUTPUT	DC VOLTAGE	12V		24V		
	RATED CURRENT	12.5A		6.3A		
	CURRENT RANGE	0 ~ 12.5A		0 ~ 6.3A		
	RATED POWER	150W		151.2W		
	RIPLINE & NOISE (max.) Note.2	120mVp-p		150mVp-p		
	VOLTAGE ADJ. RANGE	11 ~ 16VDC		23 ~ 30VDC		
	VOLTAGE TOLERANCE Note.3	±1.0%		±1.0%		
	LINE REGULATION	±0.5%		±0.3%		
	LOAD REGULATION	±0.5%		±0.3%		
	SETUP, RISE TIME	2s, 50ms (only D mode) at full load				
INPUT	HOLD UP TIME (Typ.)	24ms (only D mode) at full load				
	VOLTAGE RANGE	B:19 ~ 36VDC C:36 ~ 72VDC D:72 ~ 144VDC or 85 ~ 132VAC				
	EFFICIENCY (Typ.)	75%	77%	79%	77%	80%
	DC CURRENT (Typ.)	8.5A/24V	4.2A/48V	2.1A/96V	8.5A/24V	4.2A/48V
	INRUSH CURRENT (Typ.)	D:22.5A/96VDC				2.1A/96V
PROTECTION	LEAKAGE CURRENT	<0.75mA / 120VAC (SD-150D)				
	OVERLOAD	105 ~ 135% rated output power				
		Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	16.8V ~ 20V/10% LOAD	31.5 ~ 37.5V/10% LOAD			
ENVIRONMENT		Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	WORKING TEMP.	-10 ~ +60°C (Refer to output load 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)				
SAFETY & EMC (Note 4)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes				
	SAFETY STANDARDS	IEC/BS EN/EN 62368-1(for D type only), EAC TP TC 004 approved, design refer to AS/NZS 62368.1				
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH				
OTHERS	EMI CONDUCTION & RADIATION	Compliance to BS EN/EN55032 (CISPR32) Class B, EAC TP TC 020				
	EMS IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,6,8; BS EN/ENV50204, light industry level, EAC TP TC 020				
	MTBF	2897.06K hrs min. Telcordia SR-332 (Bellcore) ; 419.6K hrs min. MIL-HDBK-217F (25°C)				
NOTE	DIMENSION	199*110*50mm (L*W*H)				
	PACKING	0.86Kg; 16pcs/14.5Kg/0.95CUFT				
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 0.1uf & 47uf 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. 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) 5. 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). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx						

■ Mechanical Specification

Case No. 906 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

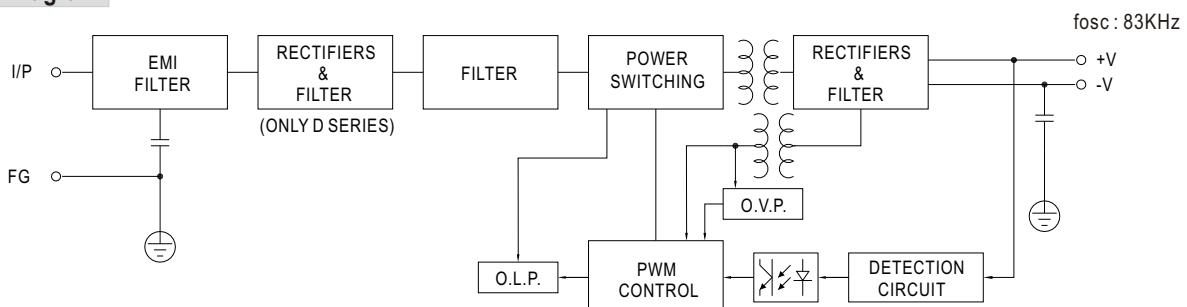
※ SD-150B,C

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

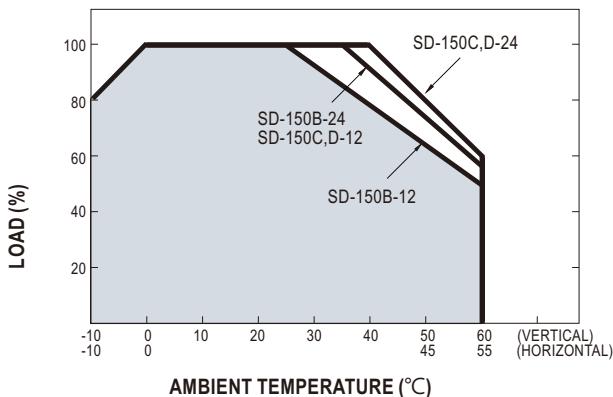
※ SD-150D

Pin No.	Assignment
1,2	AC/DC INPUT

■ Block Diagram



■ Derating Curve



■ Static Characteristics (24V)

