

150W Single Output DC-DC Converter

SD-150 series



■ Features :

- 2:1 wide input range
- Protections: Short circuit/Over load/Over voltage
- 1500VDC 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
- 1 year warranty

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

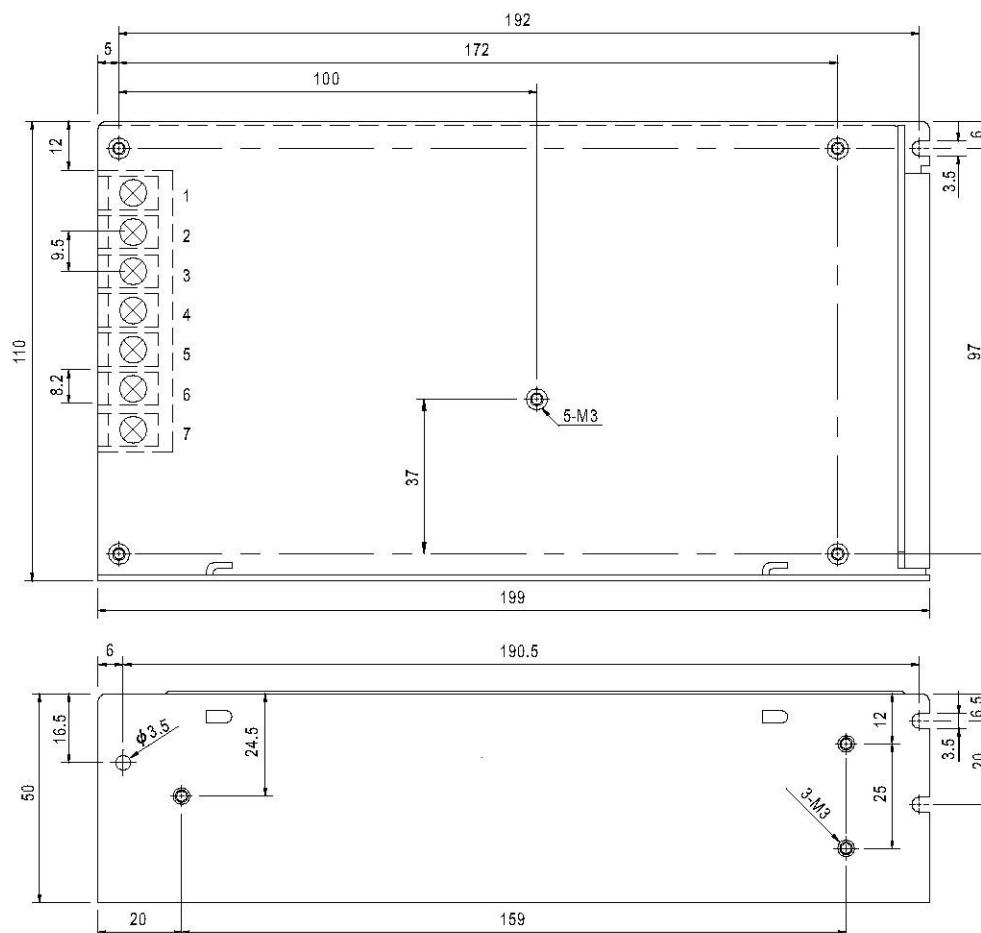
SPECIFICATION

MODEL	183-764	678-3590	183-736	183-742	678-3596	183-714
OUTPUT	DC VOLTAGE	12V		24V		
	RATED CURRENT	12.5A		6.3A		
	CURRENT RANGE	0 ~ 12.5A		0 ~ 6.3A		
	RATED POWER	150W		151.2W		
	RISSLE & 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 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.)	6.8A/24V	3.4A/48V	2.7A/96V	6.8A/24V	3.4A/48V
	INRUSH CURRENT (Typ.)	D: 22.5A/96VDC				
PROTECTION	LEAKAGE CURRENT	<0.75mA / 120VAC (SD-150D)				
	OVER LOAD	105 ~ 135% rated output power				
		Protection type : Fold back current limiting, recovers automatically after fault condition is removed				
ENVIRONMENT	OVER VOLTAGE	16.8V ~ 20V/10% LOAD	31.5 ~ 37.5V/10% LOAD			
		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				
SAFETY & EMC (Note 4)	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes				
	SAFETY STANDARDS	EN60950-1 CB 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				
OTHERS	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B				
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,6,8; ENV50204 Light industry level, criteria A				
	MTBF	296.2K hrs min. (SD-150B)	289.9K hrs min. (SD-150C)	289K Hrs min. (SD-150D)	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. The final equipment must be re-confirmed that it still meets EMC directives.

■ Mechanical Specification

Case No. 906 Unit:mm


Terminal Pin. No Assignment

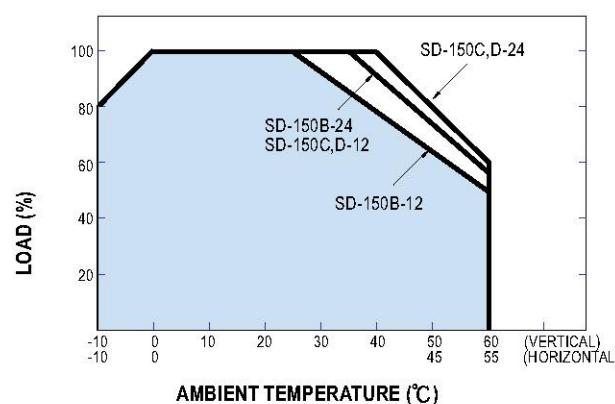
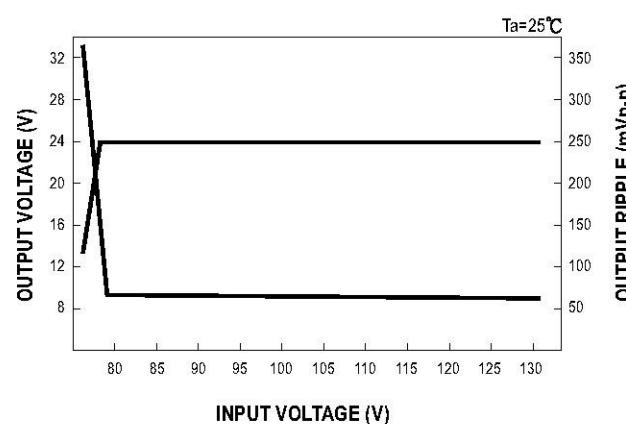
Pin No.	Assignment	Pin No.	Assignment
1,2	INPUT 	4,5	DC OUTPUT -V
3	FG \pm	6,7	DC OUTPUT +V

SD-150B,C

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

SD-150D

Pin No.	Assignment
1,2	AC/DC INPUT

■ Derating Curve

■ Static Characteristics (24V)


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