



# 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**

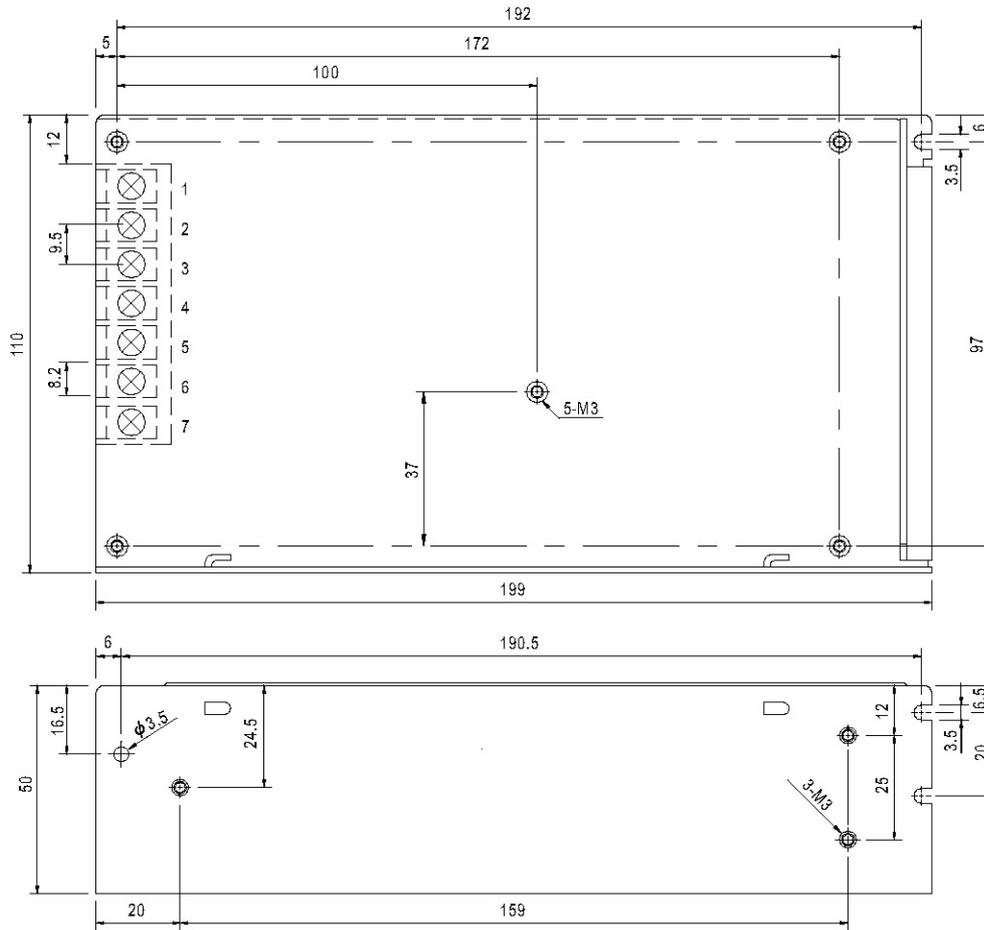
### SPECIFICATION

MODEL	183-764		183-736		183-742		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				
	RIPPLE & 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							
HOLD TIME (Typ.)	24ms(only D mode) at full load								
INPUT	VOLTAGE RANGE	B: 19 ~ 36VDC		C: 36 ~ 72VDC		D: 72 ~ 144VDC or 85 ~ 132VAC			
	EFFICIENCY (Typ.)	75%	77%	79%	77%	80%	82%		
	DC CURRENT (Typ.)	6.8A/24V	3.4A/48V	2.7A/96V	6.8A/24V	3.4A/48V	2.7A/96V		
	INRUSH CURRENT (Typ.)	D: 22.5A/96VDC							
	LEAKAGE CURRENT	<0.75mA / 120VAC (SD-150D)							
PROTECTION	OVER LOAD	105 ~ 135% rated output power Protection type : Fold back current limiting, recovers automatically after fault condition is removed							
	OVER VOLTAGE	16.8V ~ 20V/10% LOAD				31.5 ~ 37.5V/10% LOAD			
ENVIRONMENT	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)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
SAFETY & EMC (Note 4)	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							
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B							
OTHERS	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)	
	DIMENSION	199*110*50mm (L*W*H)							
	PACKING	0.86Kg; 16pcs/14.5Kg/0.95CUFT							
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> </ol>								



**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

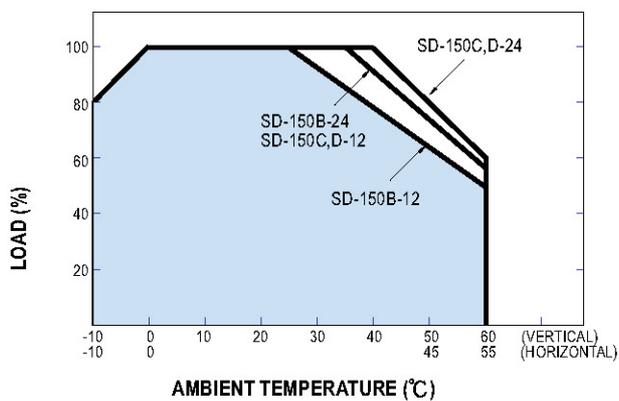
※ SD-150B,C

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

※ SD-150D

Pin No.	Assignment
1,2	AC/DC INPUT

**Derating Curve**



**Static Characteristics (24V)**

