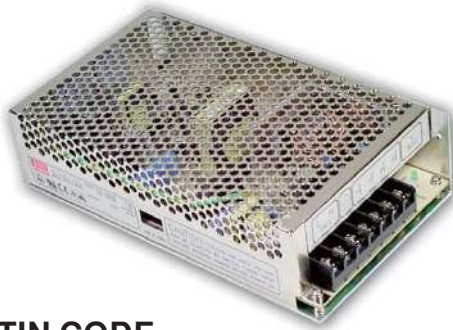




# 150W Single Output DC-DC Converter

# 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



## GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



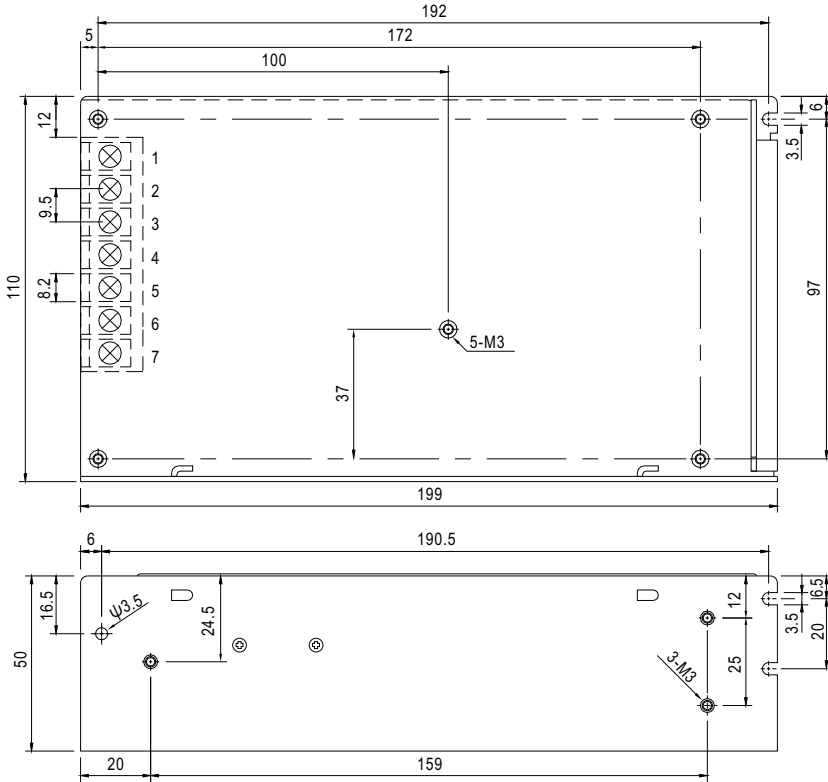
## SPECIFICATION

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		
	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 UP 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%	
	DC CURRENT (Typ.)	8.5A/24V	4.2A/48V	2.1A/96V	8.5A/24V	4.2A/48V	2.1A/96V
	INRUSH CURRENT (Typ.)	D:22.5A/96VDC					
	LEAKAGE CURRENT	<0.75mA / 120VAC (SD-150D)					
PROTECTION	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 Protection type : Hiccup mode, recovers automatically after fault condition is removed		
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	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					
	EMI CONDUCTION & RADIATION	Compliance to BS EN/EN55032 (CISPR32) Class B, EAC TP TC 020					
OTHERS	EMS IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,6,8; BS EN/EN55035, 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)					
	DIMENSION	199*110*50mm (L*W*H)					
	PACKING	0.86Kg; 16pcs/14.5Kg/0.95CUFT					
NOTE	<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F &amp; 47 μ F parallel capacitor.</li> <li>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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 <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a>)</li> <li>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).</li> </ol> ※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a>						

**Mechanical Specification**

(Unit: mm , tolerance  $\pm 1$ mm)

Case No. 906



**Terminal Pin No. Assignment**

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

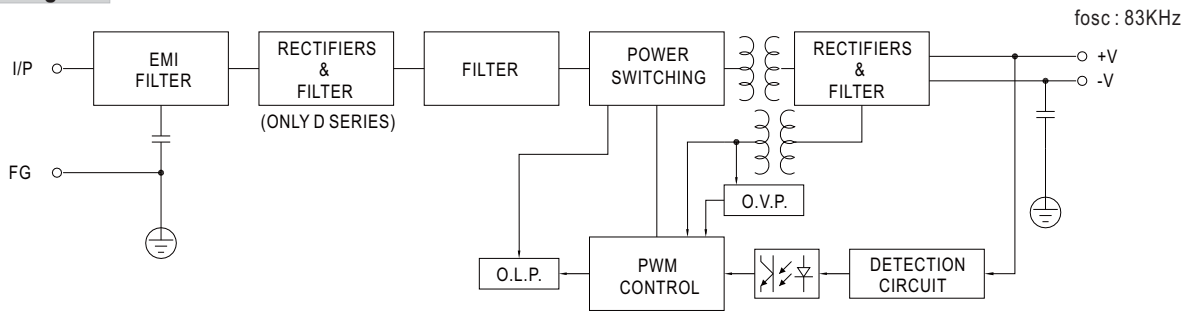
※ SD-150B,C

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

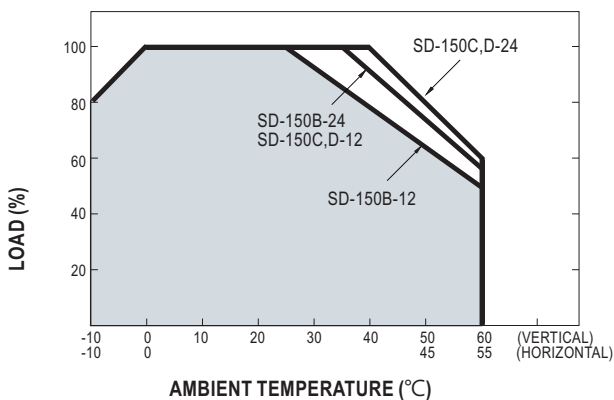
※ SD-150D

Pin No.	Assignment
1,2	AC/DC INPUT

**Block Diagram**



**Derating Curve**



**Static Characteristics (24V)**

