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TECHNOLOGY GROUP

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Full-service, independent repair center
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along with credit for buybacks and trade-ins.

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so your equipment works exactly as you specify.

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- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

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Find the *Mean Well SD-50B-12* at our website: ***Click HERE***

50W Single Output DC-DC Converter

SD-50 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
- Fixed switching frequency at 83KHz
- Low cost
- High reliability
- 2 years warranty

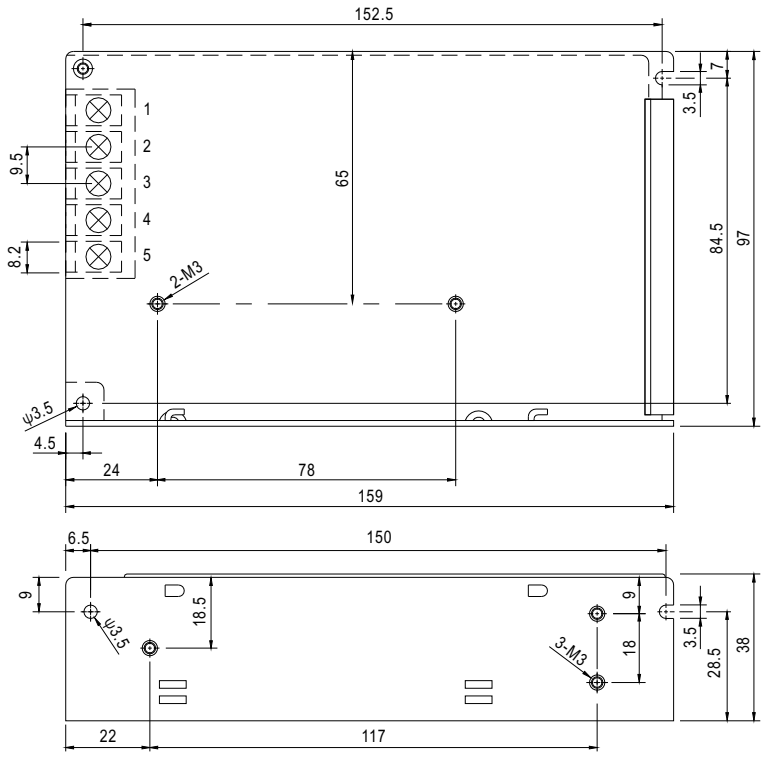
SPECIFICATION

MODEL		SD-50A-5	SD-50B-5	SD-50C-5	SD-50A-12	SD-50B-12	SD-50C-12	SD-50A-24	SD-50B-24	SD-50C-24
OUTPUT	DC VOLTAGE	5V			12V			24V		
	RATED CURRENT	10A			4.2A			2.1A		
	CURRENT RANGE	0 ~ 10A			0 ~ 4.2A			0 ~ 2.1A		
	RATED POWER	50W			50.4W			50.4W		
	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, HOLD UP TIME	2.5s, 50ms, ------ at full load								
INPUT	VOLTAGE RANGE	A:9.2 ~ 18VDC	B:19 ~ 36VDC		C:36 ~ 72VDC					
	EFFICIENCY (Typ.)	70%	73%	76%	72%	75%	78%	74%	80%	83%
	DC CURRENT	7A/12V	3A/24V	1.5A/48V	7A/12V	3A/24V	1.5A/48V	7A/12V	3A/24V	1.5A/48V
PROTECTION	OVERLOAD	105 ~ 150% 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/10% load		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed								
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	Design refer to LVD, EAC TP TC 004 approved								
	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℃/ 70% RH								
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EAC TP TC 020								
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8, EN55024, heavy industry level, criteria A, EAC TP TC 020								
OTHERS	MTBF	365.6K hrs min.(SD-50A) 357.5K hrs min.(SD-50B) 368.5K Hrs min.(SD-50C) MIL-HDBK-217F (25℃)								
	DIMENSION	159*97*38mm (L*W*H)								
	PACKING	0.48Kg; 24pcs/12.7Kg/0.75CUFT								
NOTE	1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25℃ 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℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).									

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■ Mechanical Specification

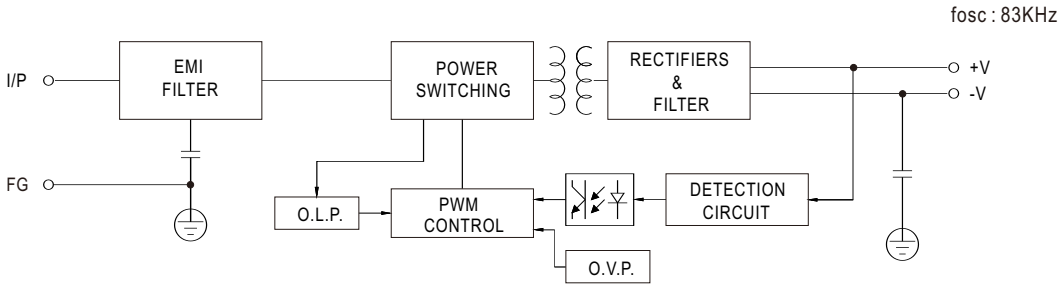
Case No. 901 Unit:mm



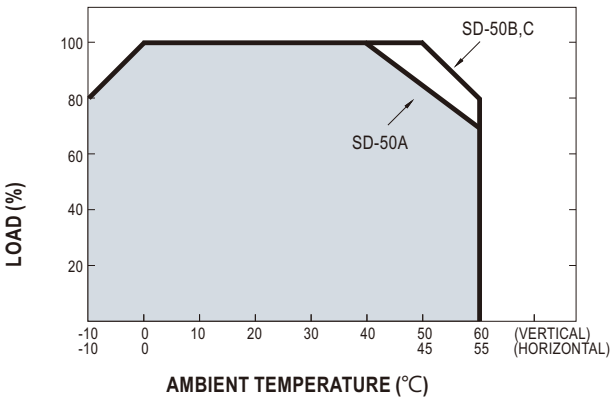
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	DC INPUT V+	4	DC OUTPUT -V
2	DC INPUT V-	5	DC OUTPUT +V
3	FG ⏚		

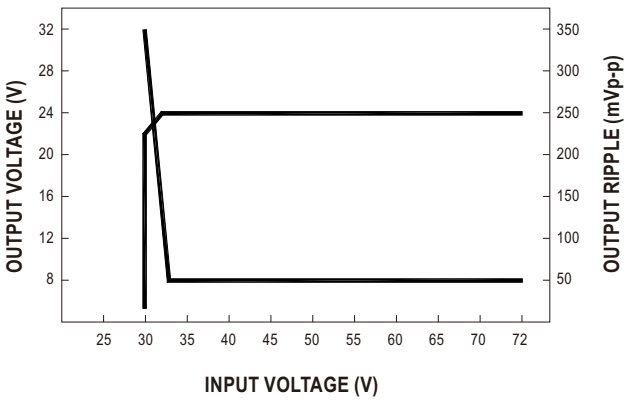
■ Block Diagram



■ Derating Curve



■ Static Characteristics(SD-50C-24V)



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