

15W Single Output DC-DC Converter

SD-15 series

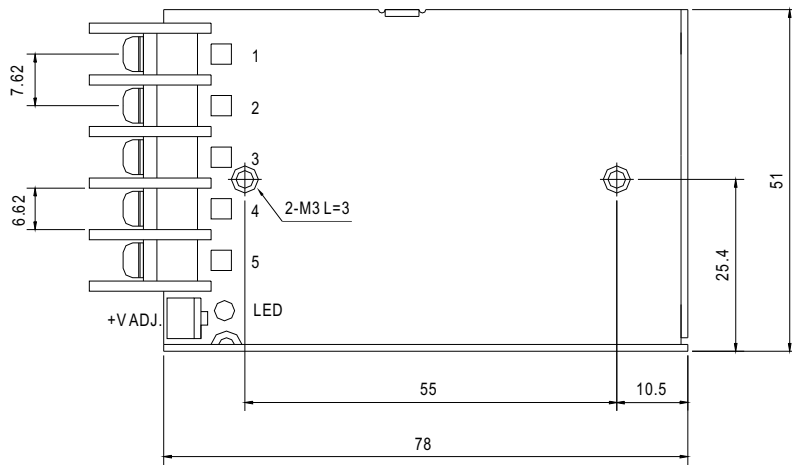

- Features :
- 2:1 wide input range
- Protections: Short circuit/Over load /voltage
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Low cost
- High reliability
- 2 years warranty


SPECIFICATION

MODEL		SD-15A-05	SD-15B-05	SD-15C-05	SD-15A-12	SD-15B-12	SD-15C-12	SD-15A-24	SD-15B-24	SD-15C-24
OUTPUT	DC VOLTAGE	5V			12V			24V		
	RATED CURRENT	3A			1.25A			0.625A		
	CURRENT RANGE	0 ~ 3A			0 ~ 1.25A			0 ~ 0.625A		
	RATED POWER	15W			15W			15W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p			120mVp-p			150mVp-p		
	VOLTAGE ADJ. RANGE	4.75~5.5VDC			10.8~13.2VDC			21.6~26.4VDC		
	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, 25ms, --- 12VDC/24VDC/48VDC at full load									
INPUT	VOLTAGE RANGE	A: 9.2 ~ 18VDC		B: 18 ~ 36VDC		C: 36 ~ 72VDC				
	EFFICIENCY (Typ.)	68%	76%	75%	72%	76%	79%	70%	77%	78%
	DC CURRENT (Typ.)	1.9A/12VDC		0.9A/24VDC		0.45A/48VDC				
PROTECTION	OVER LOAD	105 ~ 160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	5.75 ~ 6.75V			13.8 ~ 16.2V			27.6 ~ 32.4V		
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to "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	EAC TP TC 004 approved, design refer to AS/NZS 62368.1								
	WITHSTAND VOLTAGE	I/P-O/P: 1.5KVAC I/P-FG: 1KVAC O/P-FG: 0.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25°C / 70% RH								
	EMC EMISSION	Compliance to BS EN/EN55032(CISPR32), EAC TP TC 020								
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,6,8, BS EN/EN55024, light industry level, criteria A, EAC TP TC 020								
	MTBF	644.2K hrs min.(SD-15A)		652.5K hrs min.(SD-15B)		653.5K Hrs min.(SD-15C)		MIL-HDBK-217F (25°C)		
	DIMENSION	78*51*28mm (L*W*H)								
	PACKING	0.18Kg, 60 PCS/11.8Kg								
NOTE	1. All parameters NOT specially mentioned are measured at normal 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).									

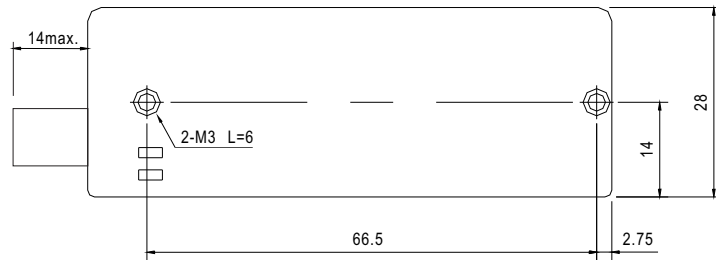
Mechanical Specification

Case No. 931A Unit:mm



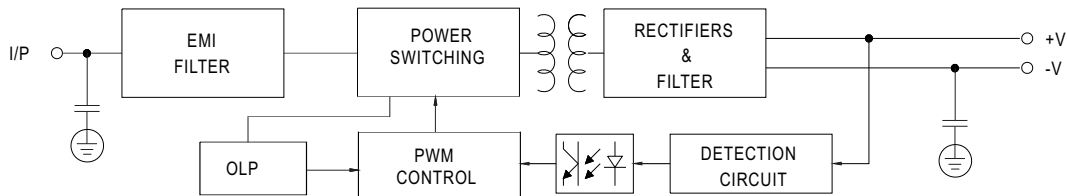
Terminal Pin No. Assignment

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



Block Diagram

fosc : 96KHz



Derating Curve

