



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

User's Manual



AS/NZS62368-1 TPTC004



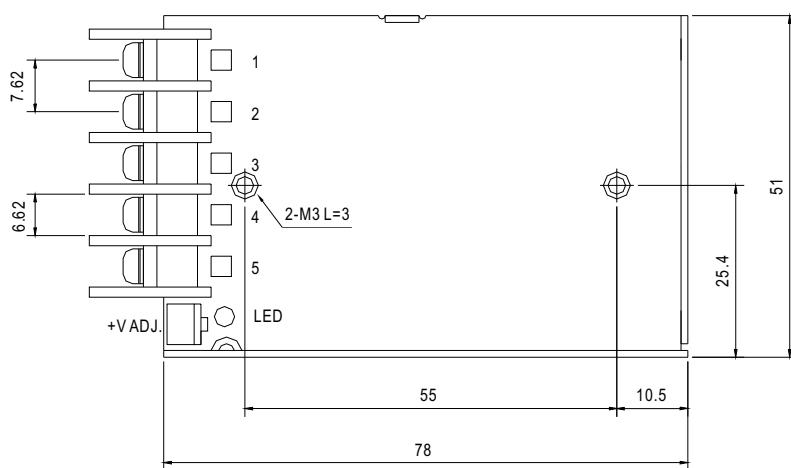
CE UK

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%							
INPUT	SETUP, RISE ,HOLD UP TIME	2.5s, 25ms,--- 12VDC/24VDC/48VDC at full load												
	VOLTAGE RANGE	A: 9.2 ~18VDC B:18 ~ 36VDC C:36~72VDC												
	EFFICIENCY(Typ.)	68%	76%	75%	72%	76%	79%	70%	77%					
	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												
	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												
OTHERS	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). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx													

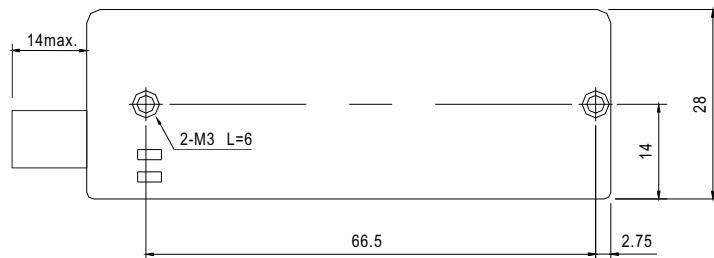
■ Mechanical Specification

Case No. 931A Unit:mm



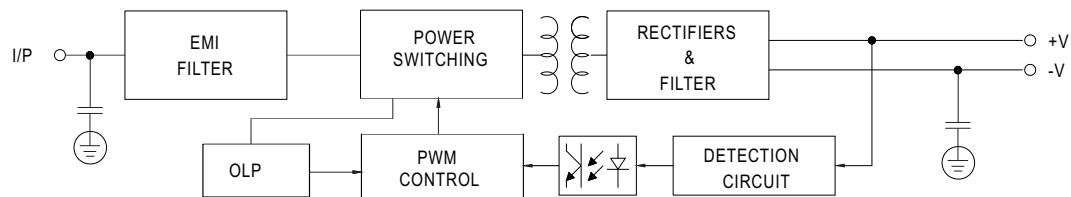
Terminal Pin No. Assignment

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



■ Block Diagram

fosc : 96KHz



■ Derating Curve

