

# Datasheet

ENGLISH

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
- 1 year warranty

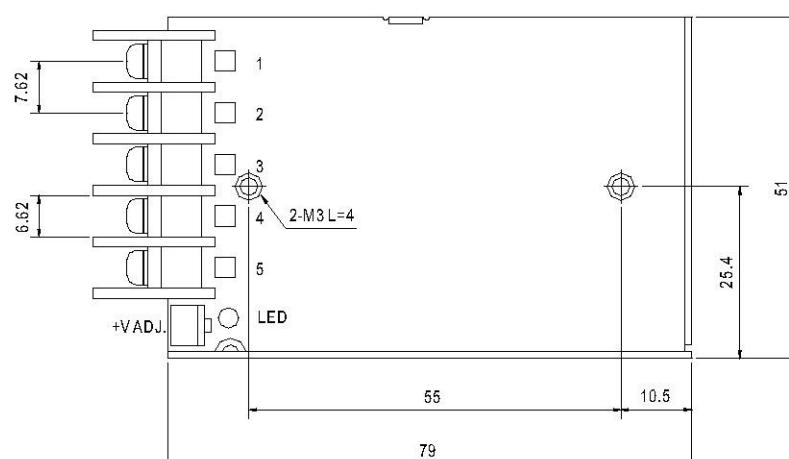
SPECIFICATION

CE

MODEL	183-821	183-792	678-3552	183-815	183-809	183-786	678-3540	678-3559	183-770
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%
PROTECTION	DC CURRENT(Typ.)	1.9A/12VDC	0.9A/24VDC	0.45A/48VDC					
	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		
		Protection type : Shut down o/p voltage, re-power on to recover							
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	WITHSTAND VOLTAGE	I/P-O/P:3KVDC I/P-FG:1.5KVDC O/P-FG:0.8KVDC							
	ISOLATION RESISTANCE	I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC							
	EMI CONDUCTION&RADIATION	Compliance to EN55022(CISPR22) CLASS B							
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,6,8;ENV50204,EN55024,light industry level,criteria A							
OTHERS	DIMENSION	79*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. The final equipment must be re-confirmed that it still meets EMC directives.								

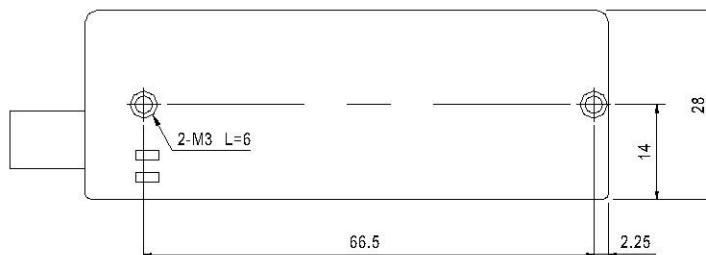
**■ Mechanical Specification**

Case No.931 Unit:mm

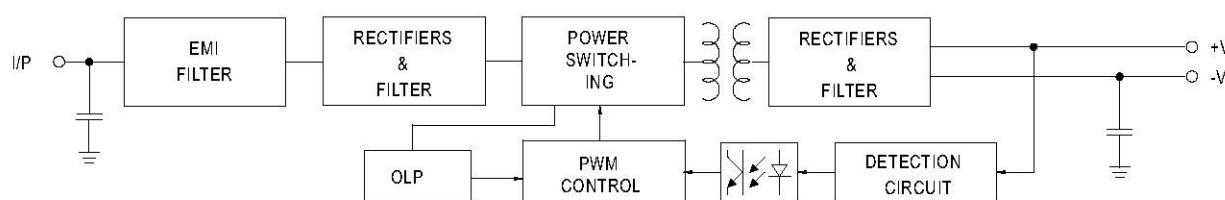


## Terminal Pin No Assignment

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


**■ Output Derating**
**■ Static Characteristics**
