



150W Railway Single Output DC-DC Converter

RSD-150F-50L

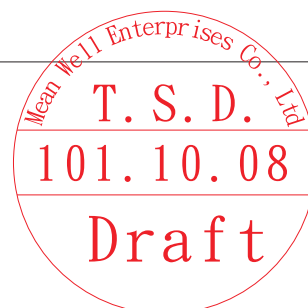


■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature / Input reverse polarity
- 4000VDC I/O isolation
- Cooling by free air convection
- Built-in constant current limiting circuit
- 1U low profile 36mm
- Design refer to EN50155 railway standard
- All using 105°C long life electrolytic capacitors
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty

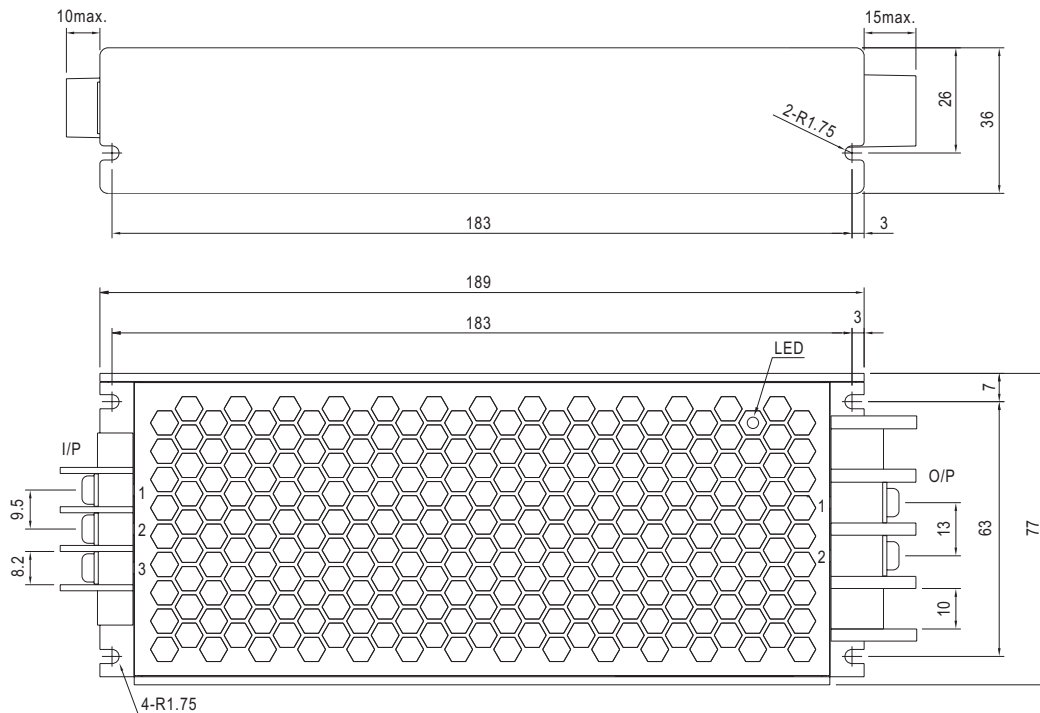
SPECIFICATION

MODEL		RSD-150F-50L
OUTPUT	DC VOLTAGE	5V
	RATED CURRENT	30A
	CURRENT RANGE	0 ~ 30A
	RATED POWER	150W
	RIPPLE & NOISE (max.) Note.2	100mVp-p
	VOLTAGE TOLERANCE Note.3	±2.0%
	LINE REGULATION	±0.5%
	LOAD REGULATION	±1.0%
	SETUP, RISE TIME	800ms, 50ms at full load
	HOLD UP TIME (Typ.)	comply with S2 level
INPUT	VOLTAGE RANGE	CONTINUOUS 50 ~ 90VDC
		1 SEC. 43.2 ~ 100.8VDC
	EFFICIENCY (Typ.)	90%
	DC CURRENT (Typ.)	2.5A/72V
	INRUSH CURRENT (Typ.)	45A/72VDC
PROTECTION	OVERLOAD	105 ~ 135% rated output power
		Protection type : Constant current limiting, recovers automatically after fault condition is removed
	OVER VOLTAGE	5.75 ~ 7V
		Protection type : Shut down o/p voltage, re-power on to recover
ENVIRONMENT	OVER TEMPERATURE	115°C ±5°C (TSW1) detect on main power transformer
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down
	WORKING TEMP.	-40 ~ +55°C (no derating) ; +70°C @ 60% load by free air convection ; +70°C (no derating with external base plate)
	WORKING HUMIDITY	20 ~ 90% RH non-condensing
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH
SAFETY	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes ; Mounting : compliance to IEC61373
	SAFETY STANDARDS	Design refer to IEC60950-1(LVD)
	WITHSTAND VOLTAGE	I/P-O/P:4KVDC I/P-FG:2.5KVDC O/P-FG:2.5KVDC
OTHERS	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH
	MTBF	223.2K hrs min. MIL-HDBK-217F (25°C)
	DIMENSION	189*77*36mm (L*W*H)
NOTE	PACKING	0.8Kg; 15pcs/13Kg/0.75CUFT
	1. All parameters NOT specially mentioned are measured at 72VDC 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. Mean Well reserves the right to adjust this spec when deemed appropriate.	



Mechanical Specification

Case No.978A Unit:mm



Input Terminal Pin No. Assignment :

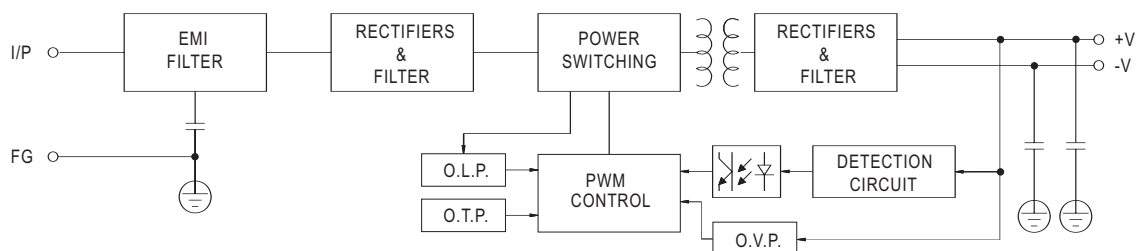
Pin No.	Assignment
1	DC INPUT V+
2	DC INPUT V-
3	FG $\perp$

Output Terminal Pin No. Assignment :

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

Block Diagram

fosc : 130KHz



Derating Curve

