

PSU.0005.0

30W Single Output LED Power Supply



- **Features :**
- Universal AC input / Full range
- Adjustable output voltage and current level
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- Fully isolated plastic case with terminal block style of I/O
- Built-in active PFC function, comply with EN61000-3-2 class C (Pin \geq 25W)
- Class II power unit, no FG
- Class 2 power unit
- 100% full load burn-in test
- High reliability
- Suitable for LED lighting and moving sign applications (Note.2)
- Compliance to worldwide safety regulations for lighting
- 2 years warranty



SPECIFICATION

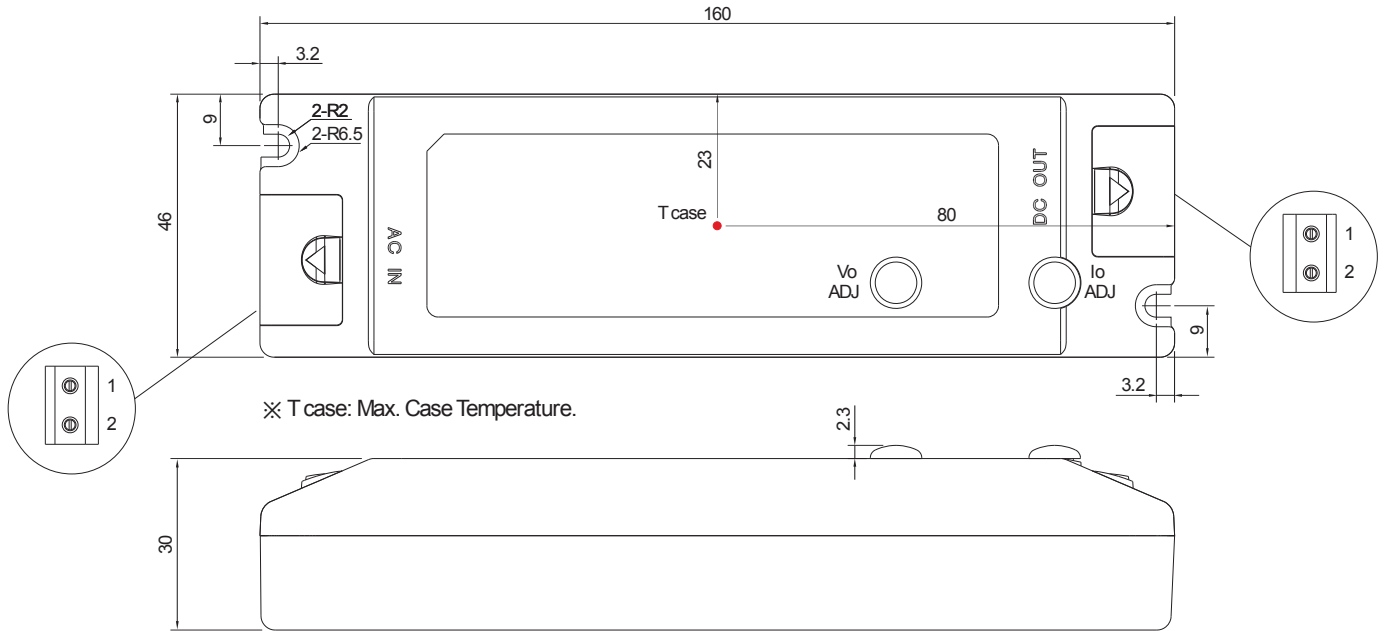
OUTPUT	DC VOLTAGE	24V
	CONSTANT CURRENT REGION Note.6	16.8 ~ 24V
	RATED CURRENT	1.25A
	CURRENT RANGE	0 ~ 1.25A
	RATED POWER	30W
	RIPPLE & NOISE (max.) Note.2	2.4Vp-p
	VOLTAGE ADJ. RANGE Note.5	22.8 ~ 26.4V
	CURRENT ADJ. RANGE Note.5	0.938 ~ 1.288A
	VOLTAGE TOLERANCE Note.3	$\pm 10\%$
	LINE REGULATION	$\pm 3.0\%$
	LOAD REGULATION	$\pm 5.0\%$
	SETUP TIME	500ms / 230VAC 3000ms / 115VAC at full load
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC 127 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz
	POWER FACTOR (Typ.)	PF>0.95/115VAC, PF>0.9/230VAC at full load (Please refer to "Power Factor Characteristic" curve)
	TOTAL HARMONIC DISTORTION	THD< 20% when output loading \geq 70% at 115VAC/230VAC input
	EFFICIENCY (Typ.)	84%
	AC CURRENT (Typ.)	0.4A/115VAC 0.2A/230VAC
	INRUSH CURRENT (Typ.)	COLD START 35A(twidth=25 μ s measured at 50% Ipeak) at 230VAC
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	64 units (circuit breaker of type B) / 64 units (circuit breaker of type C) at 230VAC
LEAKAGE CURRENT	<0.5mA/ 240VAC	
PROTECTION	OVER CURRENT	100 ~ 110% Protection type : Constant current limiting, recovers automatically after fault condition is removed
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.
	OVER VOLTAGE	27 ~ 34V Protection type : Shut down o/p voltage, re-power on to recover
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover
ENVIRONMENT	WORKING TEMP.	-30 ~ +50°C (Refer to "Derating Curve")
	WORKING HUMIDITY	20 ~ 95% RH non-condensing
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH
	TEMP. COEFFICIENT	$\pm 0.06\%/^{\circ}\text{C}$ (0 ~ 50°C)
	VIBRATION	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes
SAFETY & EMC	SAFETY STANDARDS	UL1310, TUV EN61347-1, EN61347-2-13, GB19510.14, GB19510.1, CAN/CSA C22.2 No. 223-M91(except for 48V), J61347-1, J61347-2-13 approved
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
	EMC EMISSION	Compliance to EN55015, GB17743, GB17625.1, EN61000-3-2 Class C (Pin \geq 25W), Class D (>70% load) ; EN61000-3-3
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61547, light industry level, criteria A
OTHERS	MTBF	625.5Khrs min. MIL-HDBK-217F (25°C)
	DIMENSION	160*46*30mm (L*W*H)
	PACKING	0.2Kg; 70pcs/15Kg/0.96CUFT

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Mechanical Specification

Case No. 990A Unit:mm



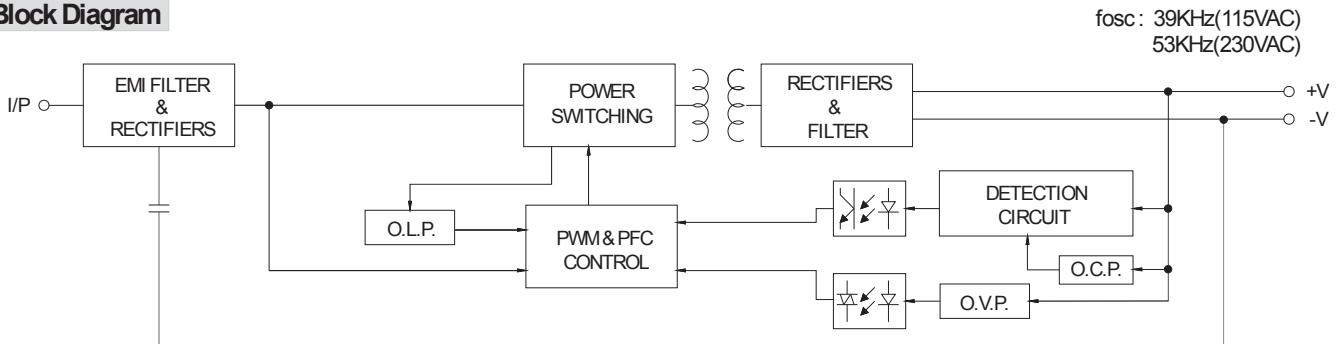
Terminal Pin No. Assignment (TB1):
SWITCLAB MB310-75002

Pin No.	Assignment
1	AC/N
2	AC/L

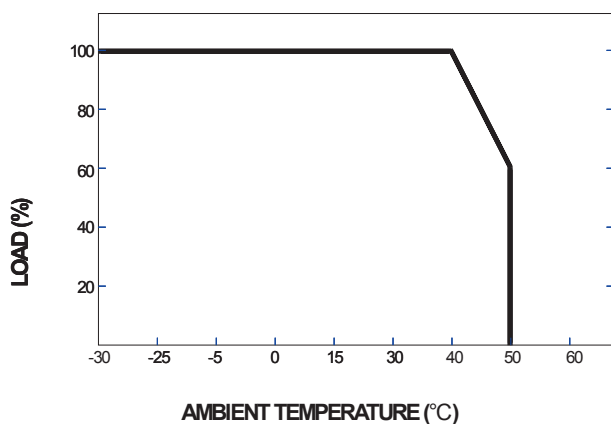
Terminal Pin No. Assignment (TB2):
SWITCLAB MB310-75002

Pin No.	Assignment
1	+V
2	-V

Block Diagram



Derating Curve



Static Characteristics

