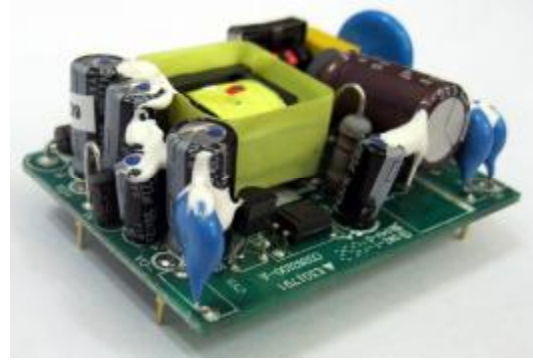


## LO10-00B24E 10W,AC-DC switching power supply

LO10 series -- is a open frame switching power supply offered by MORNSUN. It features universal input voltage, taking both DC and AC input voltage, low power consumption, high efficiency, high reliability, safer isolation. It offers good EMC performance, meets IEC61000, and widely used in industrial, office and civil applications, especially in electricity applications.



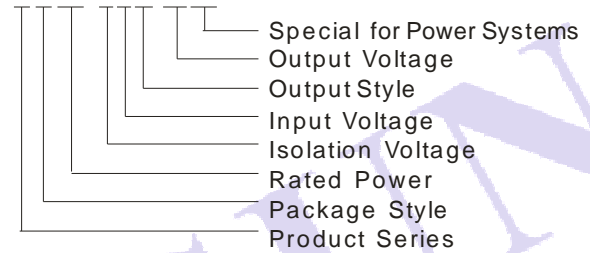
RoHS

### FEATURES

- 1、 Universal Input :85~264VAC, 50/60Hz
- 2、 Regulated output ,low ripple and noise
- 3、 Over-current protection, short circuit protection and over-voltage protection
- 4、 EMC: IEC61000 Class 4
- 5、 Open frame

### MODEL SELECTION

#### LO10-00B24E



### MODEL

Model	Input voltage	Output Power	Output voltage/ Output current	Ripple & Noise(max.)	Efficiency (typ.)
			(Vo/Io)		
LO10-00B24E	85-264V AC 90-370V DC	10W	24V/0.42A	240 mV	70%

### INPUT SPECIFICATIONS

Input voltage range	85-264VAC or 90-370VDC	
Input frequency range	47-63Hz	
Input current	@ 110VAC	0.21A, typ.
	@ 240VAC	0.13A, typ.
Inrush current	@ 110VAC	15A, typ.
	@ 240VAC	30A, typ.
Leakage current	@ 110VAC	0.2mA(typ.)/0.75 mA(max.)
	@ 240VAC	0.4mA(typ.)/0.75mA(max.)
Standby power consumption	@230VAC	0.8W typ.

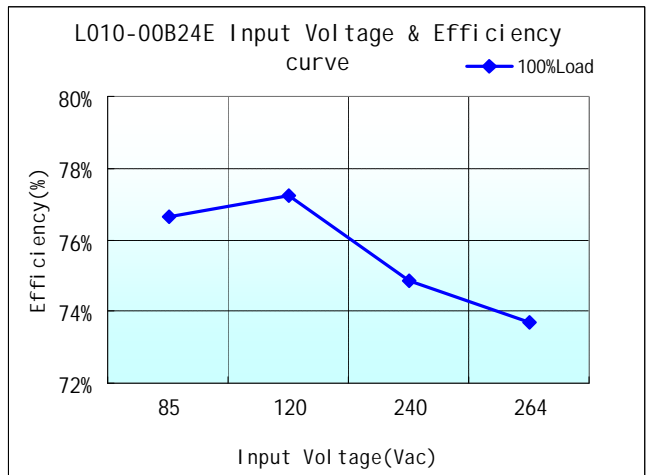
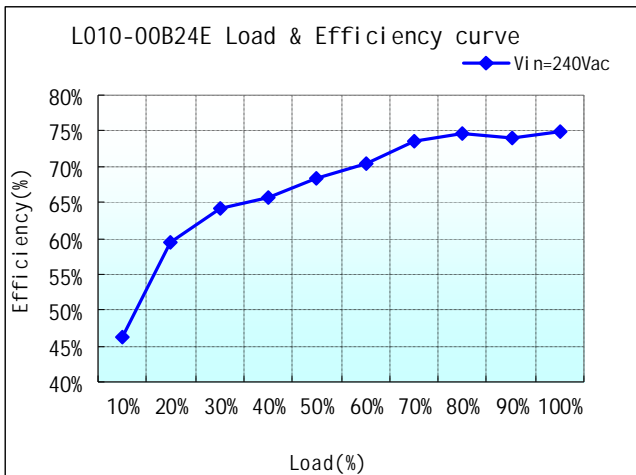
## OUTPUT SPECIFICATIONS

Output voltage stability	±2%	
Input variation	±2%	
Load variation (0%-100%)	±2%	
Minimum load	0	
Output low ripple & noise (p-p) (20MHz bandwidth)	120mV typ.	240mV max.
Max capacitive load	2200μF	
Short circuit protection	Continuous, and auto-recovery	
Over current protection	> 120% I <sub>o</sub> auto-recovery	
Output over voltage protection	30V TVS clamp	
<p>Note: Test ripple and noise by "parallel cable" method.</p>		

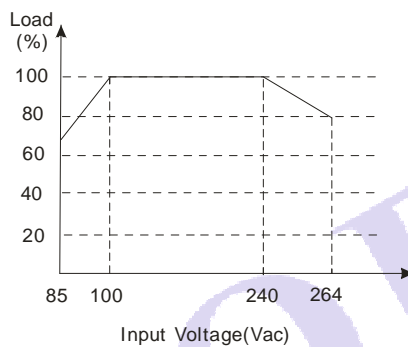
## COMMON SPECIFICATIONS

Temperature	Operating temperature	-10~+70℃ ( Power derating above 50 ℃ )	
	Storage temperature	-25℃ ~+75℃	
Humidity & Altitude	Operating humidity & altitude	5%-85% ( no dewing in device ), 3000m	
	Storage humidity & altitude	5%-95% ( no dewing in device ), 9000m	
Temperature Drift		<±0.02%/℃	
Switching Frequency		100kHz	
Delay time		<1s	
Hold-up time		20ms(typ.) @Vin=220VAC, Rated load	
I/O-isolation voltage	Isolation resistance	>100MΩ @ 25℃, 45-70%Rh, 500VDC	
	Isolation voltage (Leakage current 10mA)	Input-ground:2KVAC/1Min; Output-ground:1KVAC/1Min; Input-Output:2KVAC/1Min.	
EMC Compliance	Electrostatic discharge	IEC 61000-4-2	4kV (touch) 8kV (air)
	Electrical fast transient	IEC 61000-4-4	level 4
	Surge	IEC 61000-4-5	level 4
	Radio frequency magnetic field	IEC 61000-4-3	level 4
	Power-frequency magnetic field	IEC 61000-4-8	level 4
	Voltage dips, short interruptions and voltage variations immunity	IEC 61000-4-11	Short interruptions 0% 0.5 cycle Voltage sag 70% 10 cycle
Mechanical properties	Vibration	GB/T2423.10-2008	
	Impact	GB/T2423.5-1995	
Safety class		CLASS I	
Install		PCB	
Cooling		Free air convection	
MTBF		>300,000h @25℃	
Weight		about 50 g	

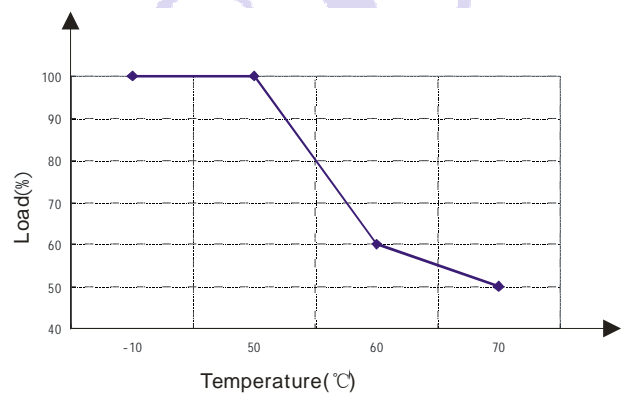
## TYPICAL EFFICIENCY CURVE



## INPUT VOLTAGE AND LOAD DIAGRAM

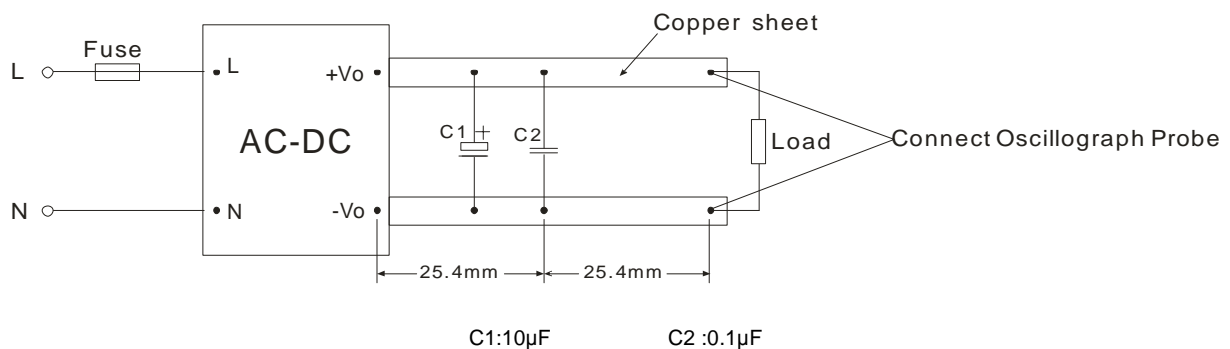


## TEMPERATURE AND LOAD DIAGRAM

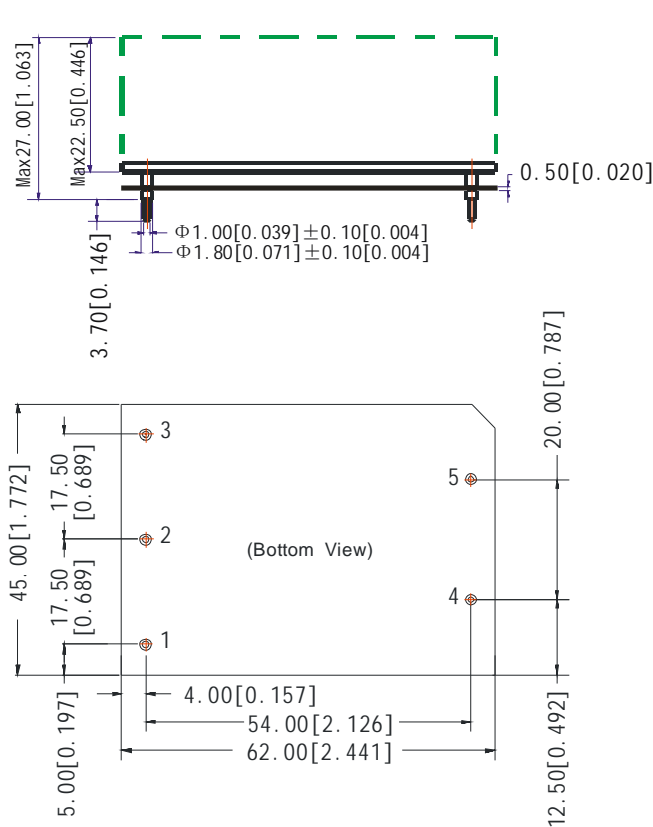


\*Note: For the input DC voltage, DC voltage and AC voltage relationship:  $V_{dc}=1.414V_{ac}-20V_{dc}$ .

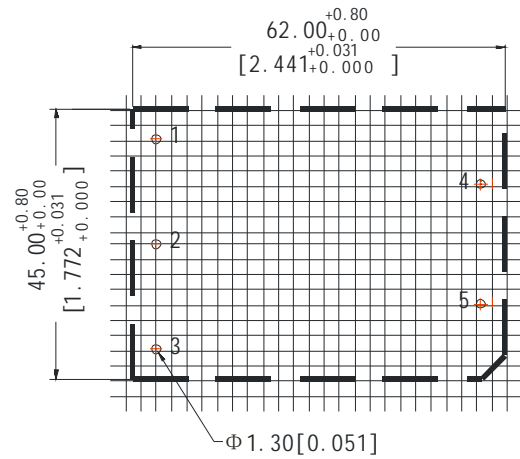
## PARALLEL LINES MEASURE



## OUTLINE AND DIMENSIONS



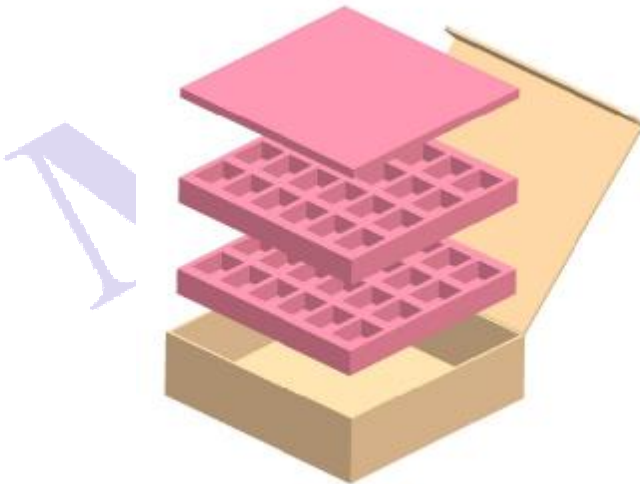
Note:  
 Unit: mm[inch]  
 Pin tolerances:  $\pm 0.25$  mm [ $\pm 0.010$  inch]  
 General tolerances  $\pm 0.50$  mm [ $\pm 0.020$  inch]  
 0.020 inch black MYLAR insulating sheet material



Note:  
 grid: 2.54\*2.54 mm[0.1\*0.1 inch].

FOOTPRINT DETAILS	
1	FG
2	AC(L)
3	AC(N)
4	-Vo
5	+Vo

## PACKAGE DIAGRAM



Inner packaging dimensions:

L\*W\*H=355\*345\*100mm

Packaging quantity: 48 PCS

Outer packaging dimensions:

L\*W\*H = 390\*360\*245mm

Packaging quantity: 96 PCS

Note:

1. All specifications measured at  $T_a=25^\circ\text{C}$ , humidity<75%, nominal input voltage and rated output load unless otherwise specified.
2. Only typical models listed, other models may be different, please contact our technical person for more details.

### **MORNSUN Science & Technology Co.,Ltd.**

Address: No. 5, Kehui St. 1, Kehui development center, Science Ave., Guangzhou Science City, Luogang district, Guangzhou, P.R.China.

Tel: 86-20-28203030

Fax: 86-20-28203068

[Http://www.mornsun-power.com](http://www.mornsun-power.com)