

# DATASHEET

## Product features

1. Ultra-thin, ultra-small, smallest volume;
2. Global universal input voltage (90~265Vac)
3. Low power consumption, green environmental protection, no-load loss<0.1W
4. Low ripple, low noise
5. High output short circuit and over-current protection and self recovery
6. High efficiency, high power density
7. Input and output isolation voltage 3000Vac
8. 100% full load aging and testing
9. High reliability, long life design, continuous working time is greater than 100,000 hours;
10. Meet UL, CE requirements; product design to meet EMC and safety testing requirement;
11. Using high-quality environmentally friendly waterproof plastic potting, moisture, vibration, water and dust to meet IP65 standards
12. Economic solutions, cost-effective
13. Work without external circuit
14. 1 year quality guarantee period

## Environmental conditions

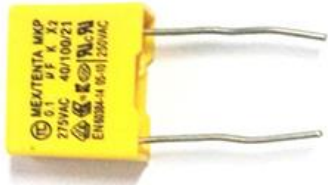
Items	Technical Parameters	Units	Notes
Working temperature	-25—+60	°C	
Storage temperature	-40—+80	°C	
Relative humidity	5—95	%	
Thermal methods	Natural cooling		
Atmospheric pressure	80—106	Kpa	
Altitude	≤2000	m	
Vibration	Vibration coefficient 10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes		Meets requirements for secondary road transportation

## Electrical characteristics


Items	Technical Parameters	Units	Notes
Rated input voltage	100-240	Vac	
Input voltage range	85-265	Vac	or 70-350Vdc
The maximum input current	≤0.1	A	
Input inrush current	≤10	A	
Input low start	≤50	mS	
Long-term reliability	MTBF≥100, 000	h	
External fuse recommended	1A / 250Vac or 10Ω wire wound resistance		Slow blow

## Input parts

Component number / recommended device	Functions	Recommended value
F1/ Fuse	Protect the circuit from damage when the module is working wrong	1A/250Vac, Slow fuse
MOV1/Varistor	The cumulative surge is to protect the module from damage	10D561K
C1/ X Safety capacitance	Filtering, safety protection (EMC certification)	0.1uF/275Vac
L1/Common-mode inductance	EMI filtering	Sensible value: 10-30mH Test requirements: 1KHZ / 0.3V current: 100-500mA



Safety capacitance



Common-mode inductance

### Notes:

- Fuse and varistor are basic protective circuits (must be connected).
- If you need to pass the authentication/certification, the Safety capacitance and common-mode inductance could not be omitted.

## Output parts

Component number / recommended device	Functions	Recommended value
C2/filter capacitor	output ripple can be controlled in 30mV after adding this capacitor	Aluminium electrolytic capacitance, capacity 100-220 UF, voltage reduction greater than 75%
RL/Load	Load	

## Safety Characteristics

Products designed to meet UL, CE safety certification requirements.

**\*Safety and electromagnetic compatibility**

Designed with the input of 0.5A UL certified insurance;

PCB board using double-sided copper clad plate production, material for the 94-V0 fire rating level;

Safety standards: Compliance with UL1012, EN60950, UL60950

Insulation voltage: I / P-O / P: 2500VAC

Insulation resistance : I / PO / P> 100M Ohms / 500VDC 25 °C 70% RH

Conduction and radiation :comply with EN55011, EN55022 (CISPR22)

Electrostatic discharge :IEC / EN 61000-4-2 level 4 8kV / 15kV

RF radiation Immunity: IEC / EN 61000-4-3 See Application Note

**\*Temperature safety design**

At room temperature,the capacitors of this power , the inner surface of the main converter maximum temperature does not exceed 90 °C;

Shell maximum surface temperature does not exceed 60 °C

## **Logo, packaging, transportation, storage**

**\* Product logo**

In place of products labeled with signs, its content in line with national standards, industry standards.

**\* Packaging logo**

Products marked with the manufacturer's name, address, zip code, product type, manufactured year, month, day on the box ;

Marked "up", "moisture" "Handle with care" and other transportation signs, all signs are in line with the provisions of GB 191.

**\* Packaging**

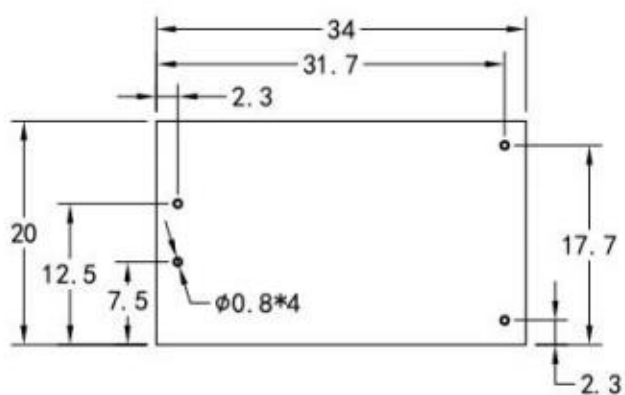
Products are separated using special plastic box packaging, with anti-vibration function, and in accordance with the provisions of GB 3873.

**\* Transport**

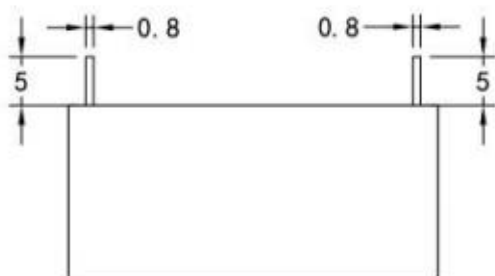
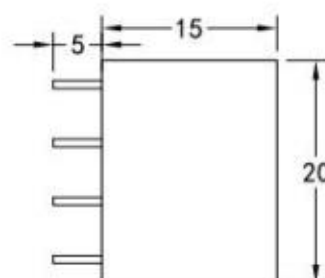
Packaged products can be shipped by any transportation service, there should be awnings in transport and no excessive vibration, impact, etc.

**\* Storage**

Products should be stored in compliance with GB 3873.



Pin function	
1	AC
2	AC
3	-Vo
4	+Vo
Weight: 20±1g	



**Dimensions Variation:**

1. Pin Spacing Variation
2. Pin Length Variation  $\pm 0.5\text{mm}$
3. Pin Diameter Variation  $-0.2\text{mm}$

单位：毫米 (mm)

