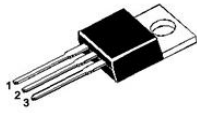


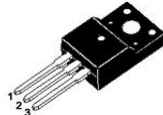


MBR3045CT/FCT/DC/CS/D

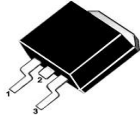
SCHOTTKY BARRIER RECTIFIER



TO-220AB/CT



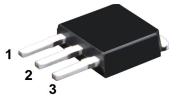
TO-220F/FCT



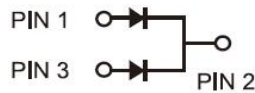
TO-263/DC



TO-252/CS



TO-251/D



FEATURES

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses. High efficiency
- Guarding for over voltage protection



APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

Primary Characteristic

I_o	2*15A
V_{RRM}	45V
I_{FSM}	300A
V_F	0.58V
T_{jmax}	150°C

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum,10s per JESD 22-

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Working Peak Reverse Voltage	V_{RWM}	45	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Rectified Current	I_o	Per Leg	15
		Total	30
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	300	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1) TO-220AB,TO-263, TO-252,TO-251 TO-220F	$R_{\theta JC}$	2	°C/W
		4	

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbol	Value		Unit	
Forward Voltage Drop(Note2)	V_F	Typ.	Max.	V	
		at $I_F=5A$	TA=25°C		0.48
		TA=125°C	0.40		-
at $I_F=10A$		TA=25°C	0.56		0.61
		TA=125°C	0.51		-
at $I_F=15A$		TA=25°C	0.63		0.70
		TA=125°C	0.58		-
Maximum Reverse Current at $V_R=45V$	I_R	TA=25°C	13		50
		TA=125°C	3		-

Note2:Pulse test: 300 μs pulse width, 1 % duty cycle



RATINGS AND CHARACTERISTIC CURVES

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

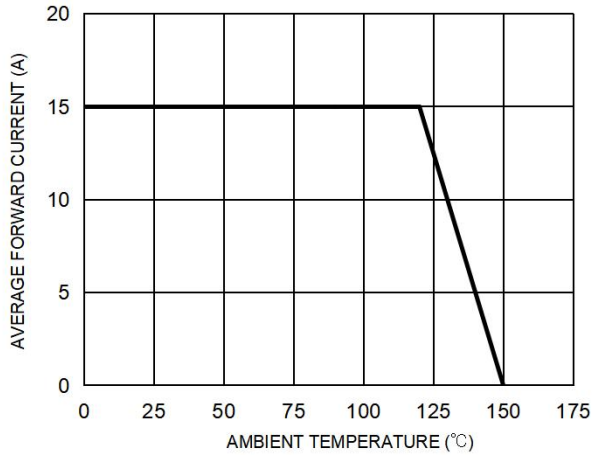


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

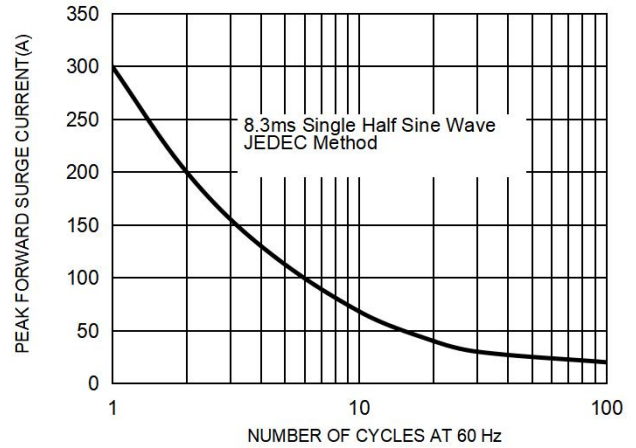


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

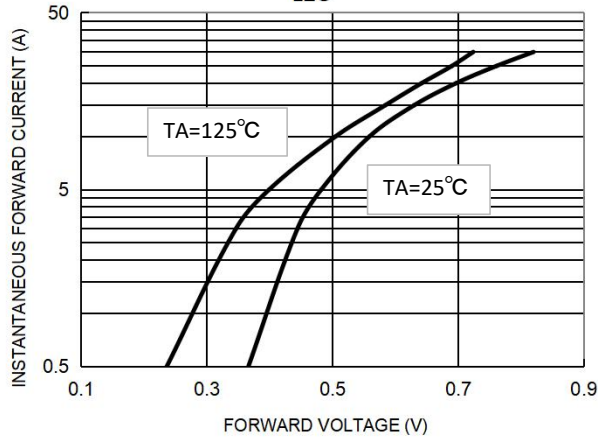
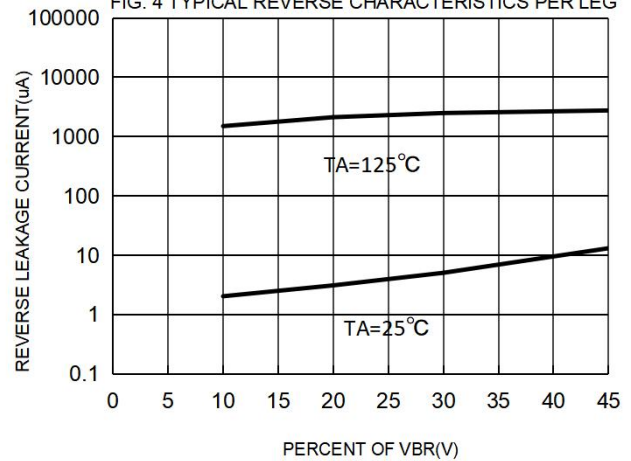


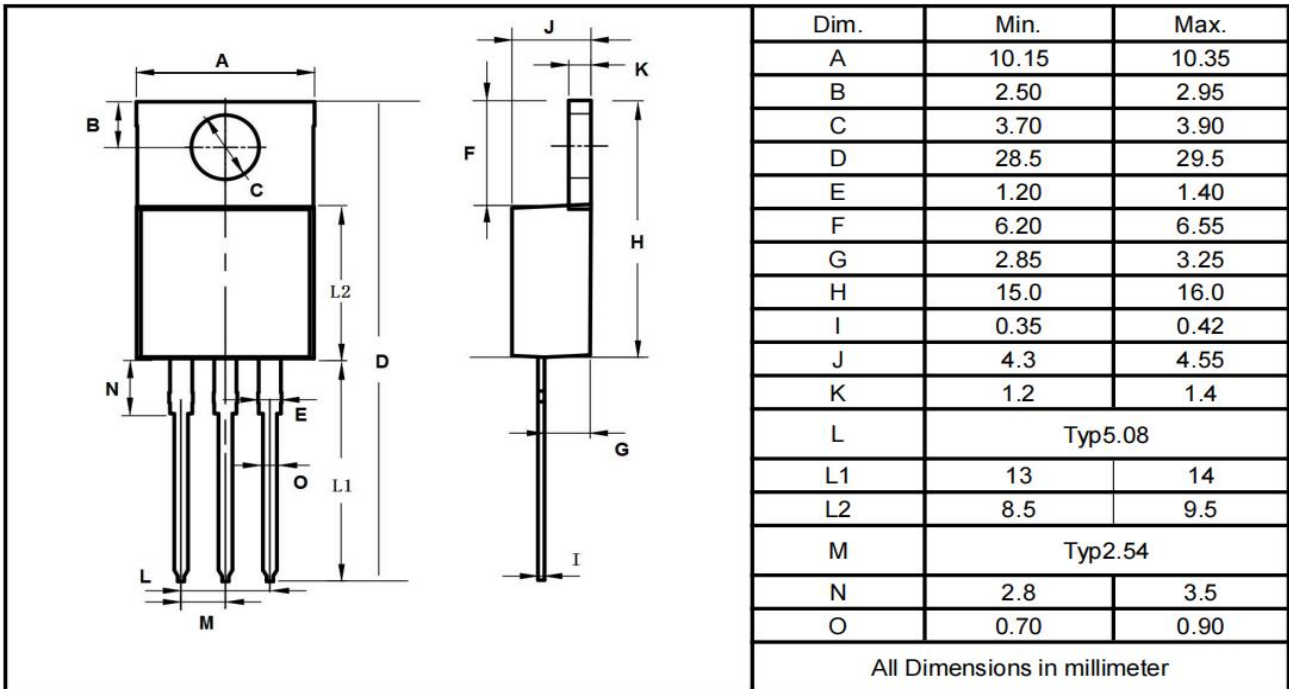
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



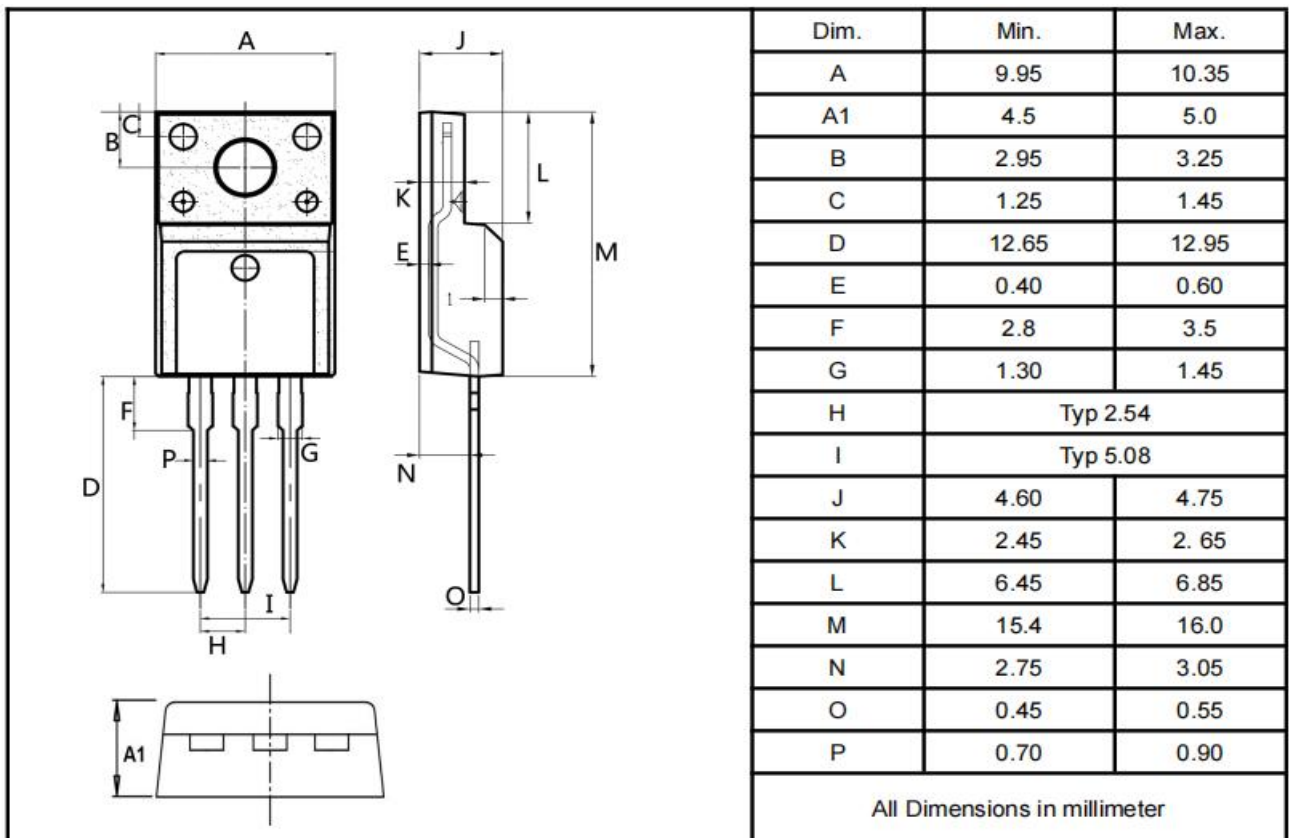


Package Outline Dimensions millimeters

TO-220AB



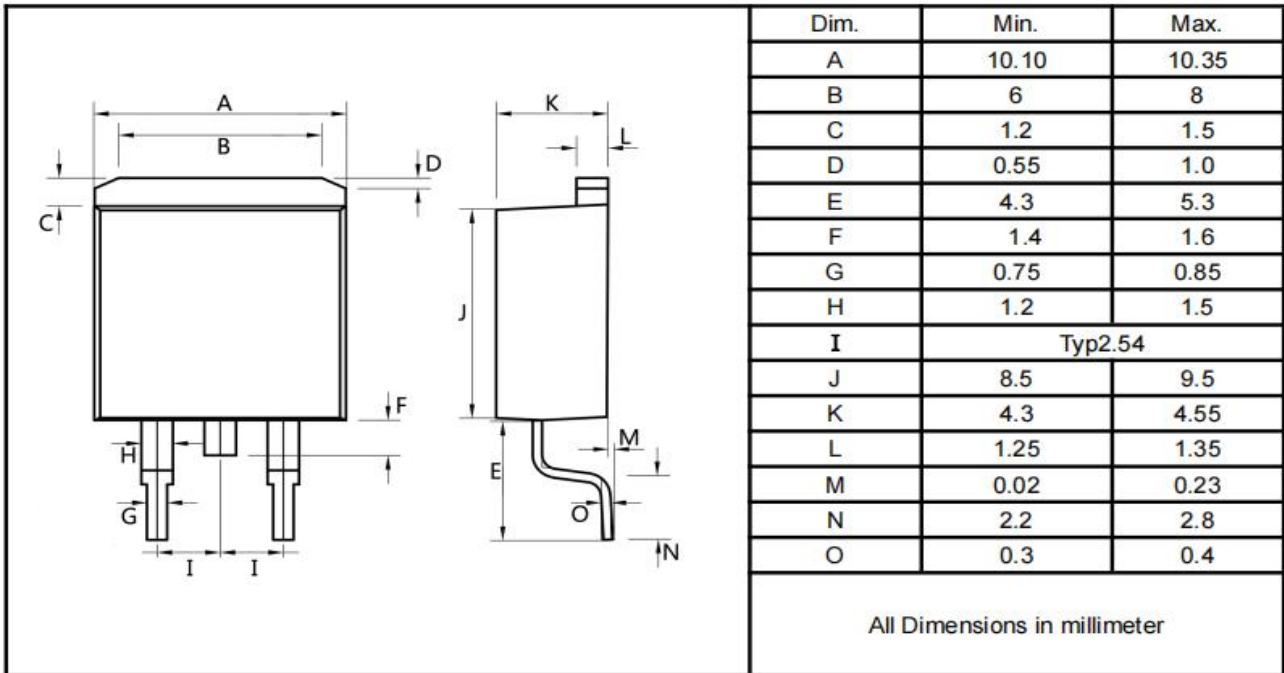
TO-220F



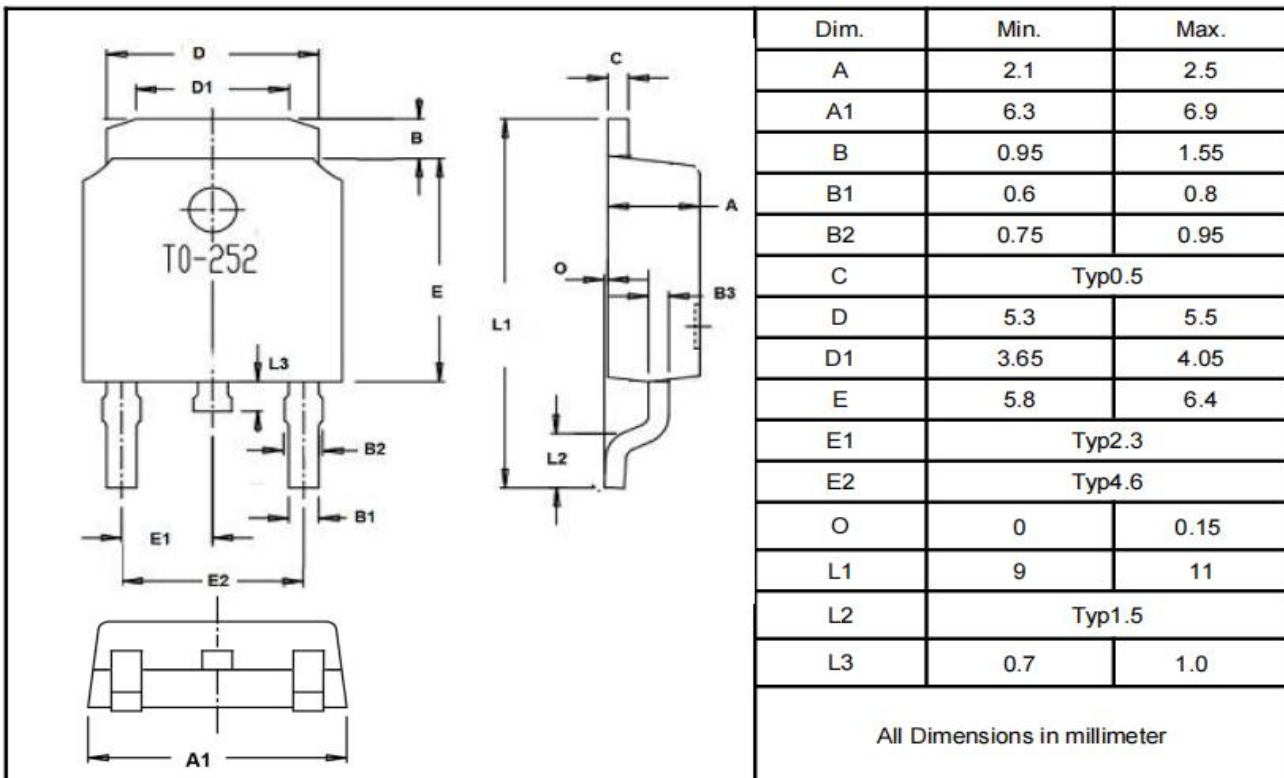


Package Outline Dimensions millimeters

T0-263



T0-252

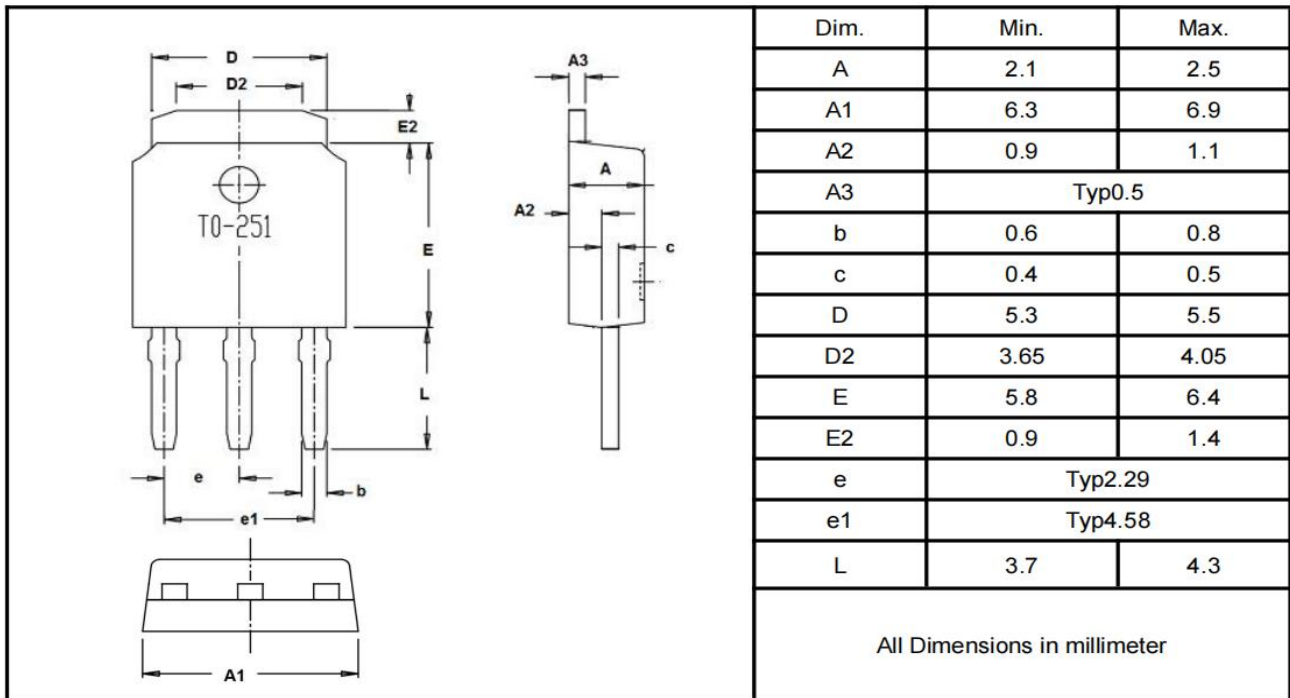




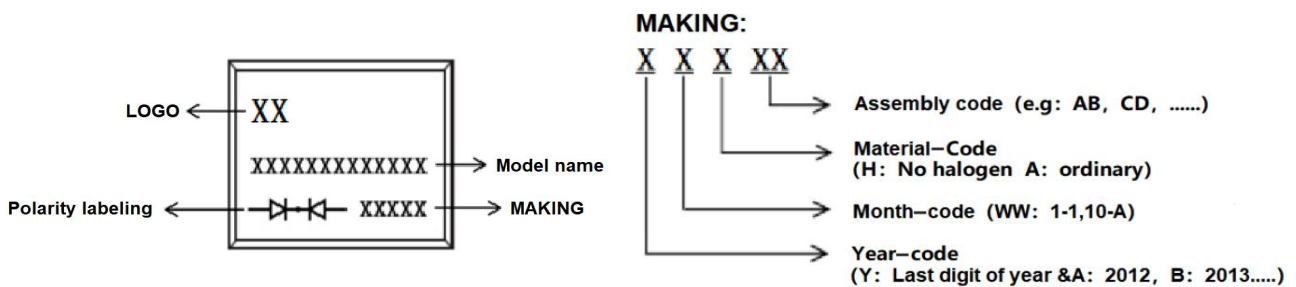
MBR3045CT/FCT/DC/CS/D

Package Outline Dimensions millimeters

TO-251



Marking on the body



Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR3045CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR3045FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR3045DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR3045DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton
MBR3045CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	5000pcs/box 25000pcs/carton
MBR3045D	TO-251	0.011oz(0.32g)	80 pcs / tube	4000pcs/box 24000pcs/carton

Note: For Halogen Free molding compound, add "H" suffix to part number above.



packing instruction

PKG	最小包装	内盒	外箱
TO-220AB TO-220F TO-263			
	50pcs/管	1000pcs/盒	5000pcs/箱
TO-263-R			
	800pcs/盘	1600pcs/盒	8000pcs/箱
TO-252			
	2500pcs/盘	5000pcs/盒	25000pcs/箱
TO-251			
	80pcs/管	4000pcs/盒	24000pcs/箱

Notice

1. All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.

2. Confirm that operation temperature is within the specified range described in the product specification. Avoid applying power exceeding normal rated power;

exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.

3. LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.