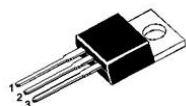
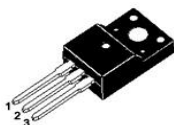


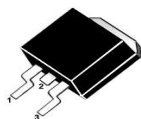
SCHOTTKY BARRIER RECTIFIER



TO-220AB/CT



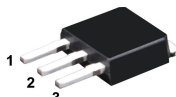
TO-220F/FCT



TO-263/DC



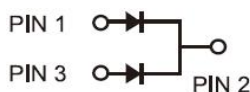
TO-252/CS



TO-251/D



TO-262/CR



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*10A
V_{RRM}	100V
I_{FSM}	250A
V_F	0.68V
T_{jmax}	150°C
Assembly code	AL

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

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	I_O	10	A
Per Leg		20	
Total			
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	250	A
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W
TO-220AB,TO-263,TO-252,TO-251,TO-262		4	
TO-220F			

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

Electrical Characteristics (Per Leg) unless otherwise specified

Parameter		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V _F	Typ.	Max.	V
at I _F =5A	TA=25°C		0.74	0.80	
	TA=125°C		0.61	-	
at I _F =10A	TA=25°C		0.81	0.85	
	TA=125°C		0.68	-	
Maximum Reverse Current at V _R =100V	TA=25°C		I _R	1.5	
	TA=125°C		1	-	mA

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

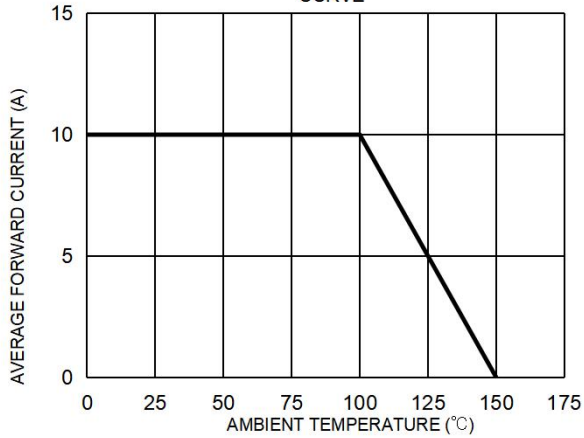


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

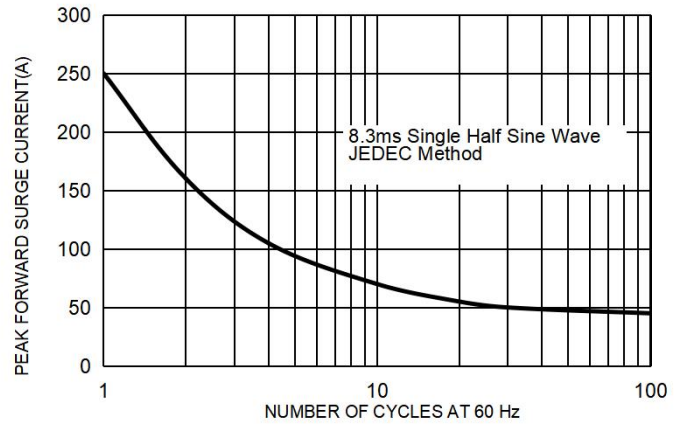


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

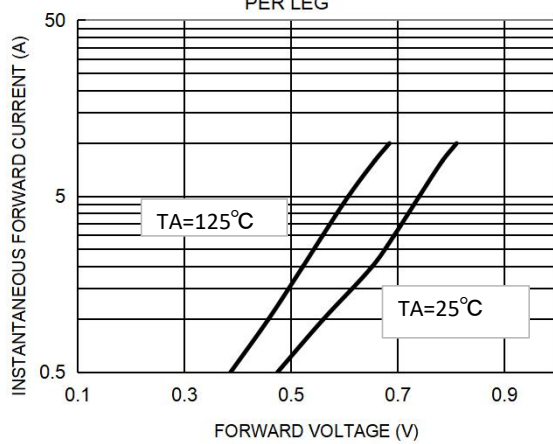
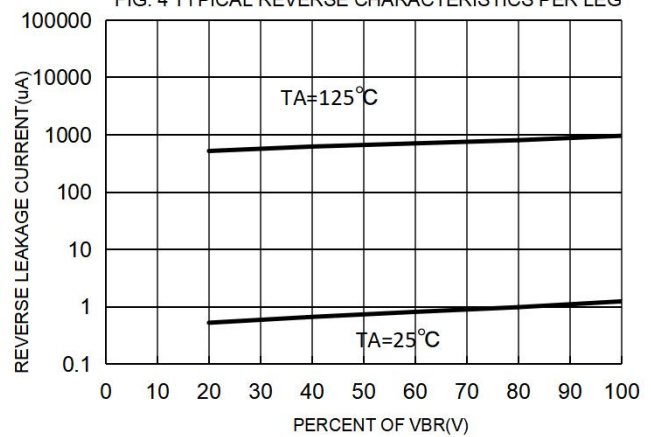
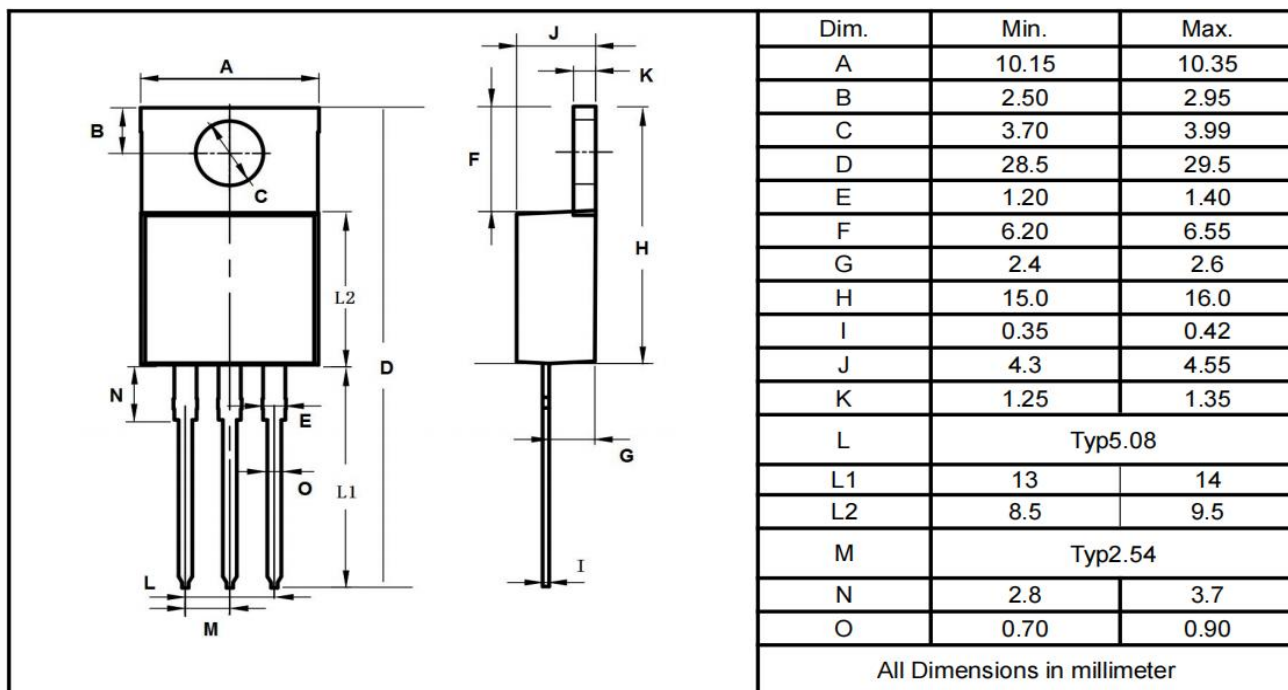
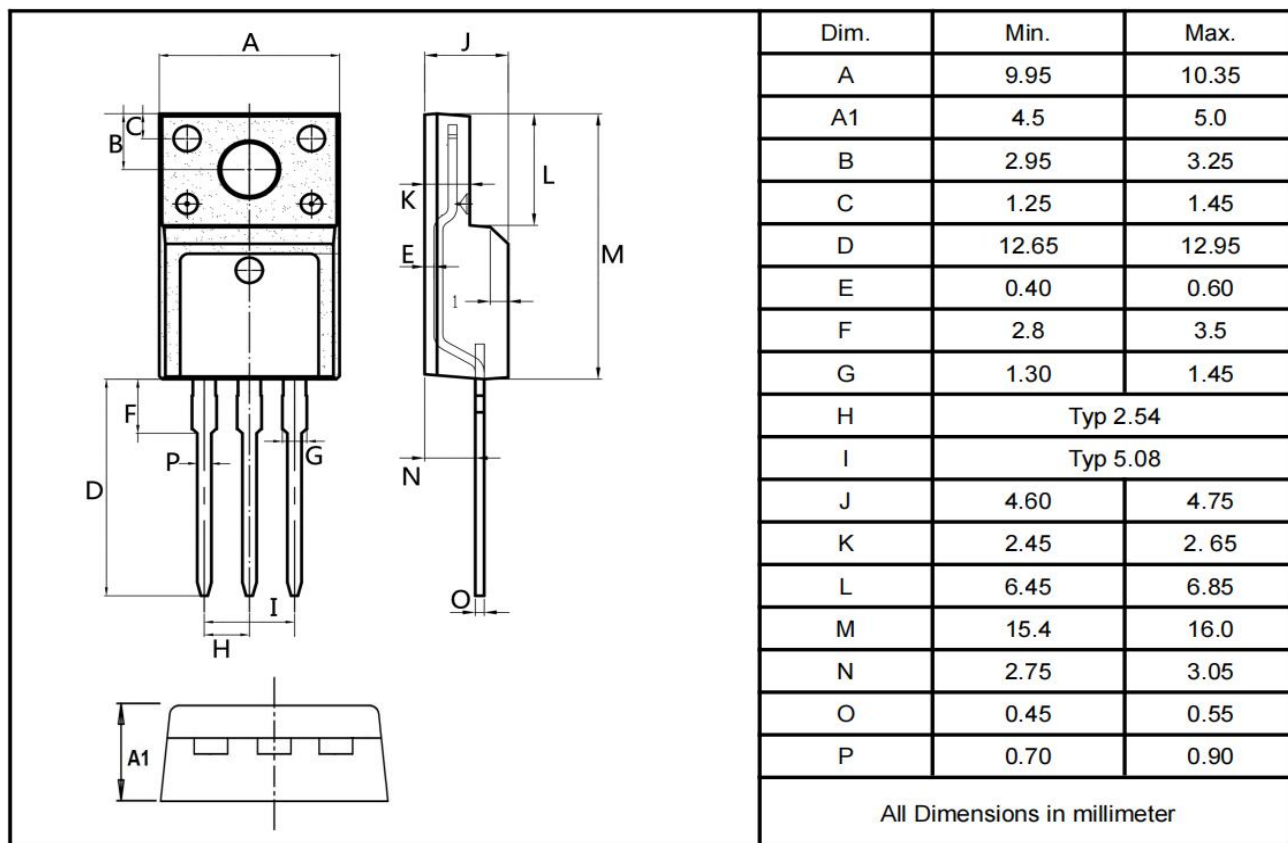
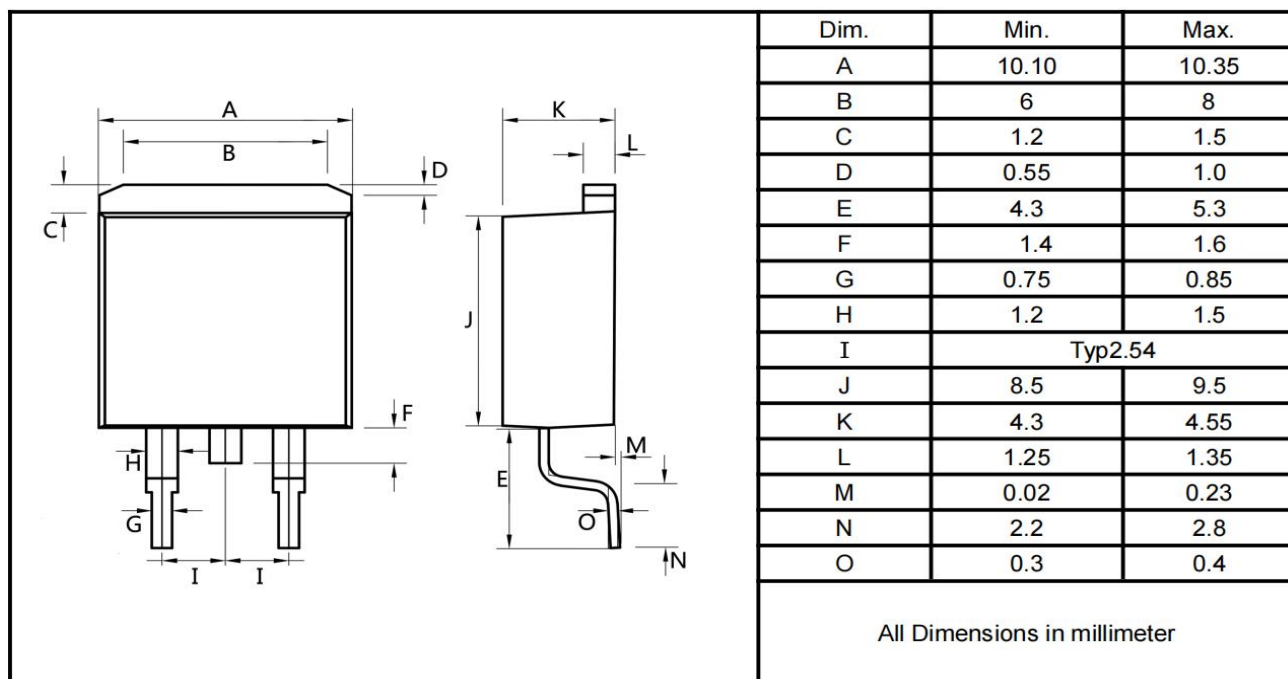
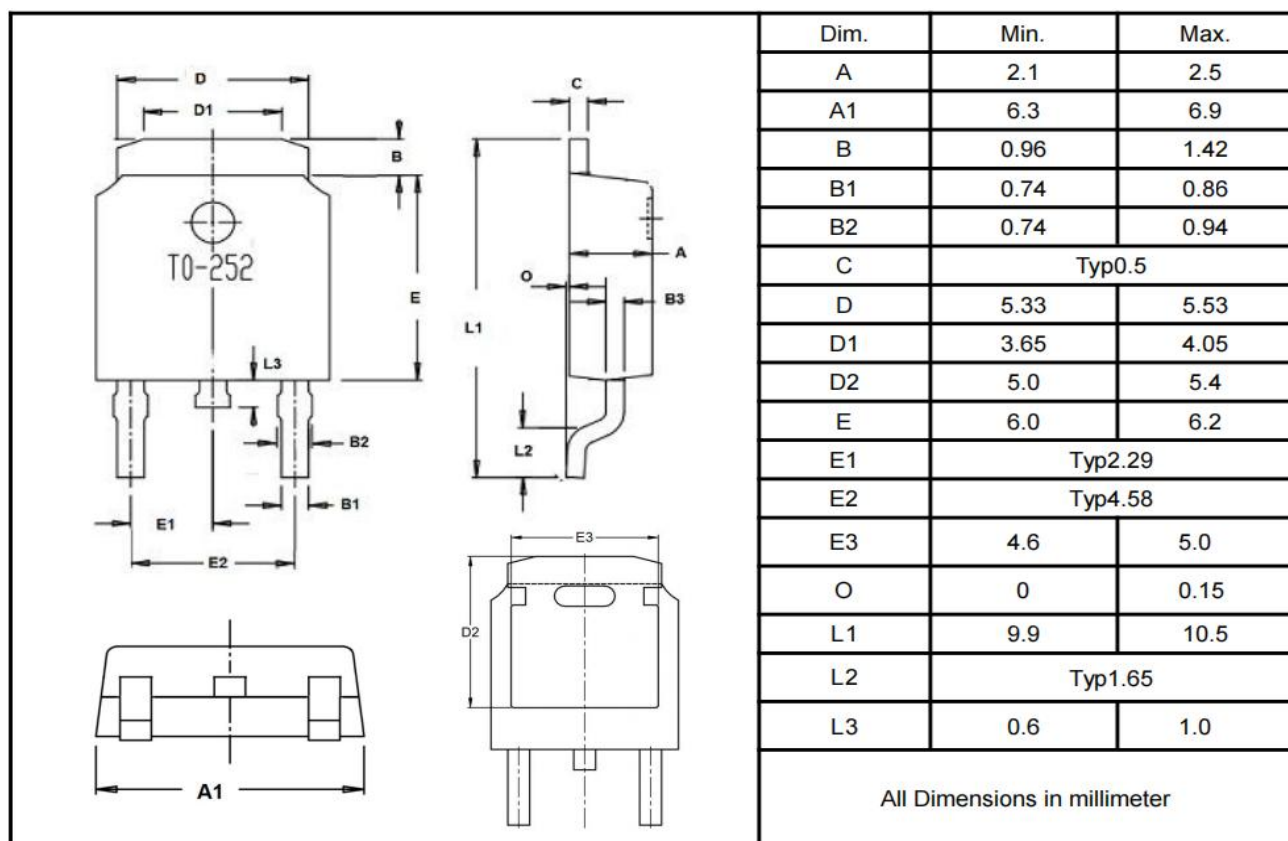


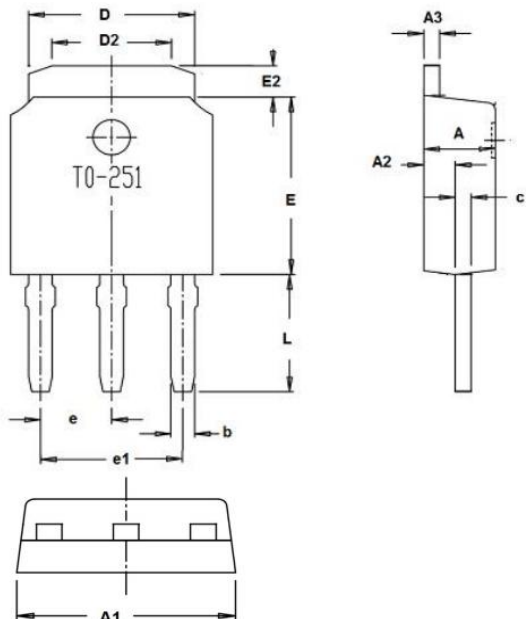
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



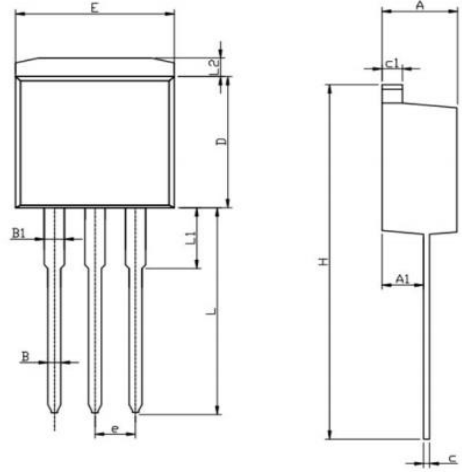
Package Outline Dimensions millimeters
TO-220AB

TO-220F


Package Outline Dimensions millimeters
T0-263

T0-252


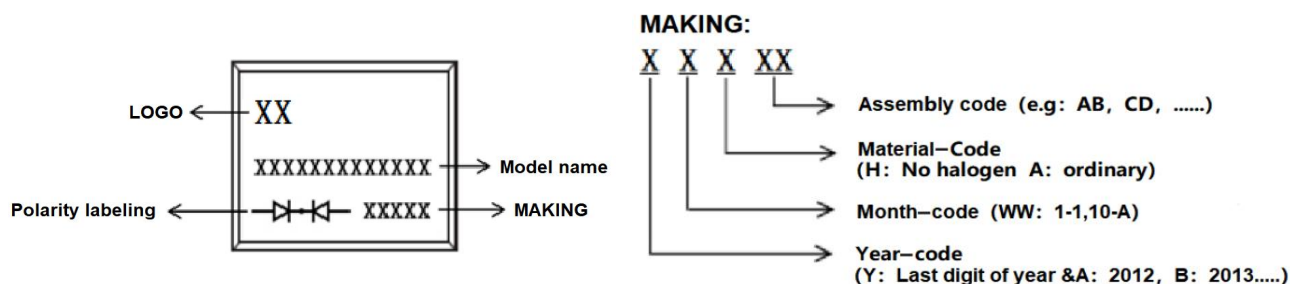
Package Outline Dimensions millimeters
T0-251

	Dim.	Min.	Max.
	A	2.1	2.5
	A1	6.3	6.9
	A2	0.9	1.1
	A3	Typ0.5	
	b	0.6	0.8
	c	0.4	0.5
	D	5.3	5.5
	D2	3.65	4.05
	E	5.8	6.4
	E2	0.9	1.4
	e	Typ2.29	
	e1	Typ4.58	
	L	3.7	4.3
	All Dimensions in millimeter		

T0-262

	Dim.	Min.	Max.
	A	4.4	4.6
	A1	2.4	2.6
	B	0.75	0.85
	B1	1.2	1.4
	C	0.35	0.42
	C1	1.25	1.35
	D	8.5	9.5
	E	10.15	10.35
	H	23	25
	L	13	14
	L1	2.8	3.5
	L2	1.2	1.5
	All Dimensions in millimeter		

Marking on the body

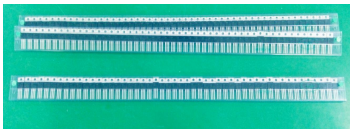
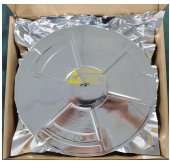
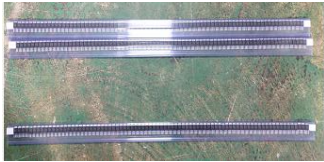


Ordering information

Part Number	Package	Base Quantity	Delivery mode
MBR20100CT	TO-220AB	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20100FCT	TO-220F	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20100DC	TO-263	50 pcs / tube	1000pcs/box 5000pcs/carton
MBR20100DC-R	TO-263	800 pcs / reel	1600pcs/box 8000pcs/carton
MBR20100CS	TO-252	2500 pcs / reel	5000pcs/box 25000pcs/carton
MBR20100D	TO-251	80 pcs / tube	4000pcs/box 24000pcs/carton
MBR20100CR	TO-262	50 pcs / tube	1000pcs/box 5000pcs/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 TO-262			
	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	24000pvs/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.