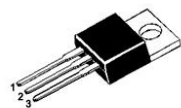
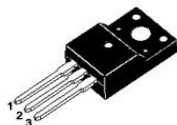
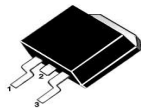


**ULTRAFAST RECOVERY RECTIFIERS**


TO-220AB/CT



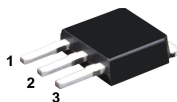
TO-220F/FCT



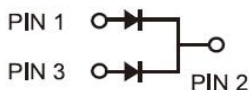
TO-263/DC



TO-252/CS



TO-251/D


**FEATURES**

- High speed switching capability
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- High reliability
- For use in low voltage, high frequency inverters


**RoHS**  
 COMPLIANT

**APPLICATIONS**

Fast recovery diode, mainly used for rectification, used in high-power equipment, The express and ultrafast recovery diodes are suitable for high frequency and ultra high frequency circuits, respectively

**Primary Characteristic**

$I_O$	2*10A
$V_{RRM}$	200V
$I_{FSM}$	180A
$V_F$	0.81V
$T_{jmax}$	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-B106

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

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	V
Working Peak Reverse Voltage	$V_{RWM}$	200	V
Maximum DC Blocking Voltage	$V_{DC}$	200	V
Maximum Average Forward Rectified Current	Per Leg	10	A
	Total	20	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	180	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-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 <sub>F</sub>	Typ.	Max.	V
at I <sub>F</sub> =2A	TA=25°C		0.77	-	
	TA=125°C		0.63	-	
at I <sub>F</sub> =3A	TA=25°C		0.80	-	
	TA=125°C		0.67	-	
at I <sub>F</sub> =10A	TA=25°C		0.93	0.97	
	TA=125°C		0.81	-	
Maximum Reverse Current at V <sub>R</sub> =200V	TA=25°C	I <sub>R</sub>	0.1	1	μA
	TA=125°C		5	-	μA
Maximum Reverse Recovery Time at I <sub>F</sub> =0.5A, I <sub>R</sub> =1A,		T <sub>rr</sub>	-	35	ns

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

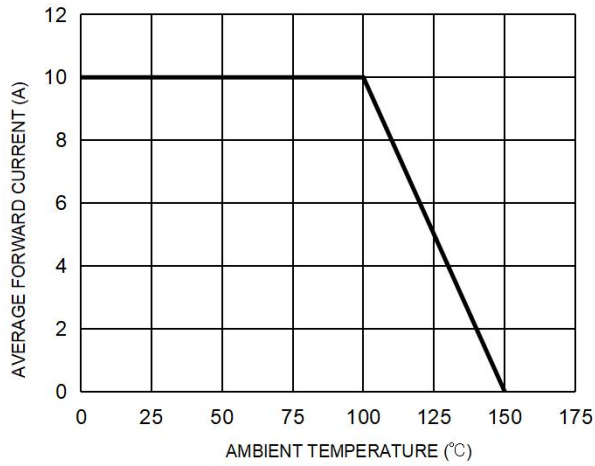


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

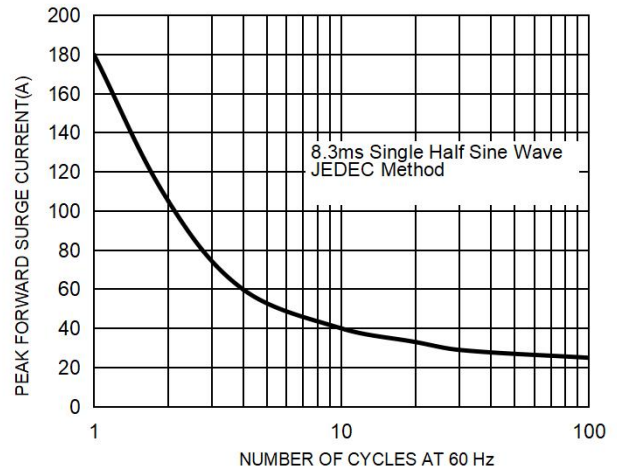


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

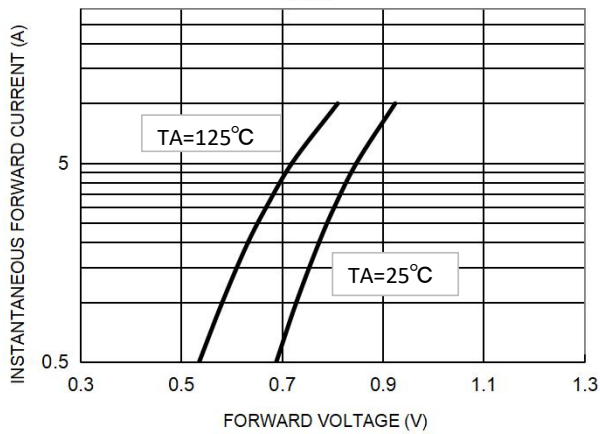
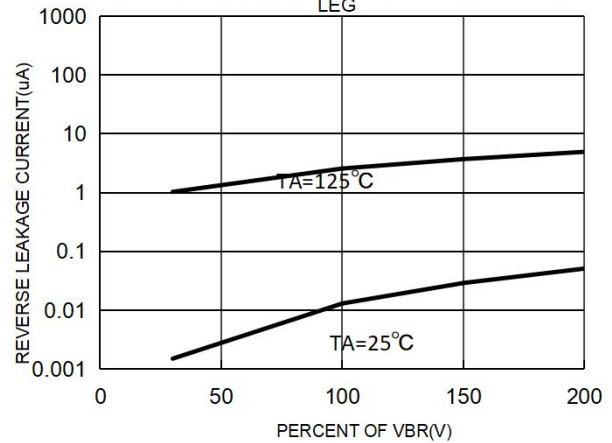
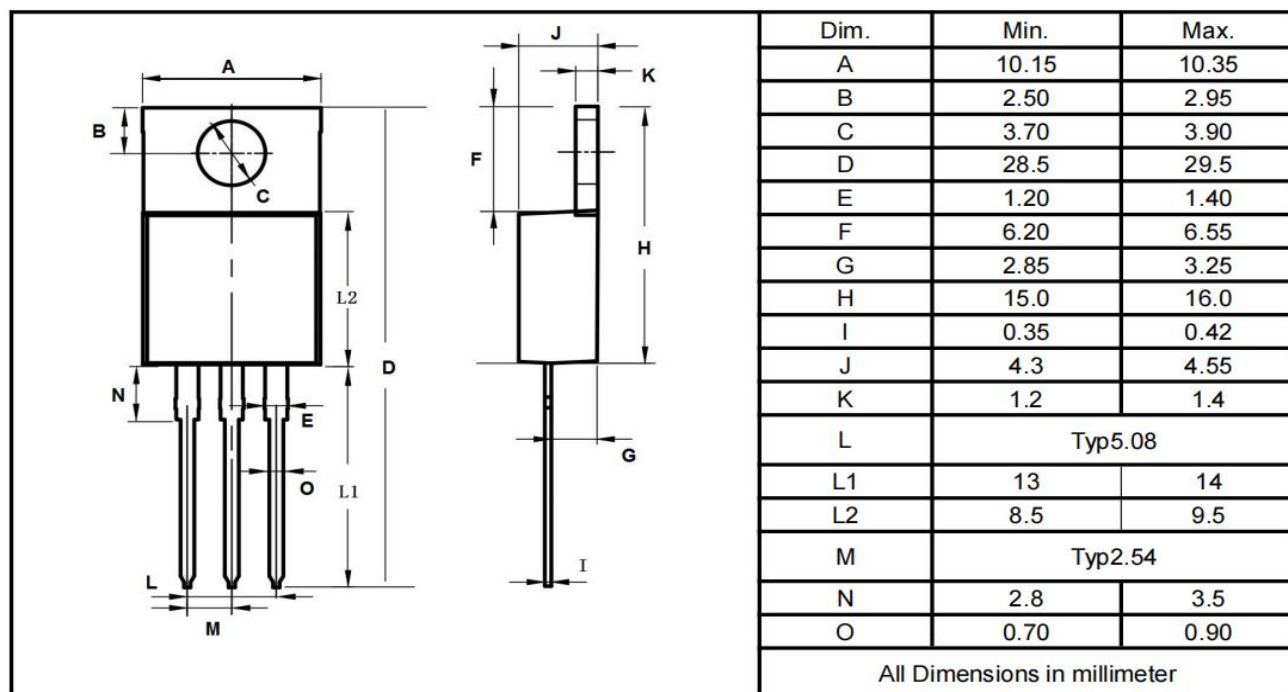
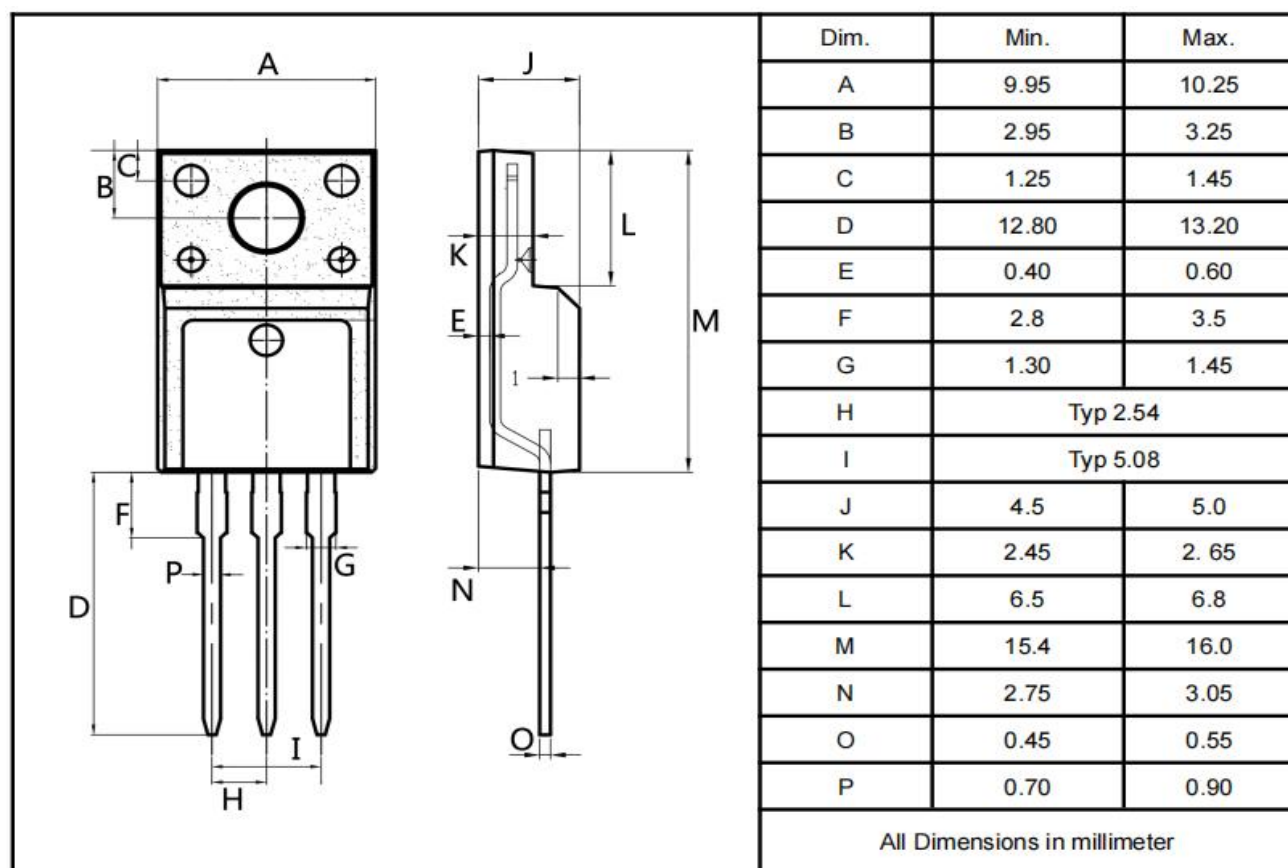
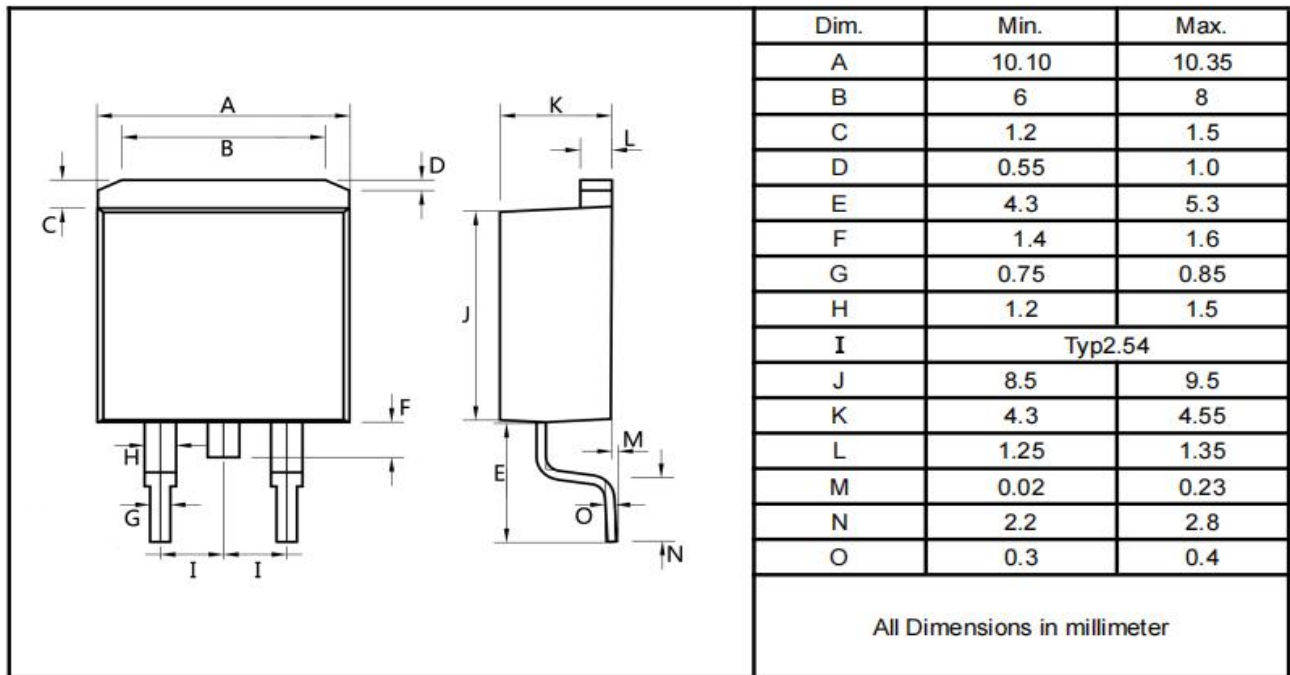
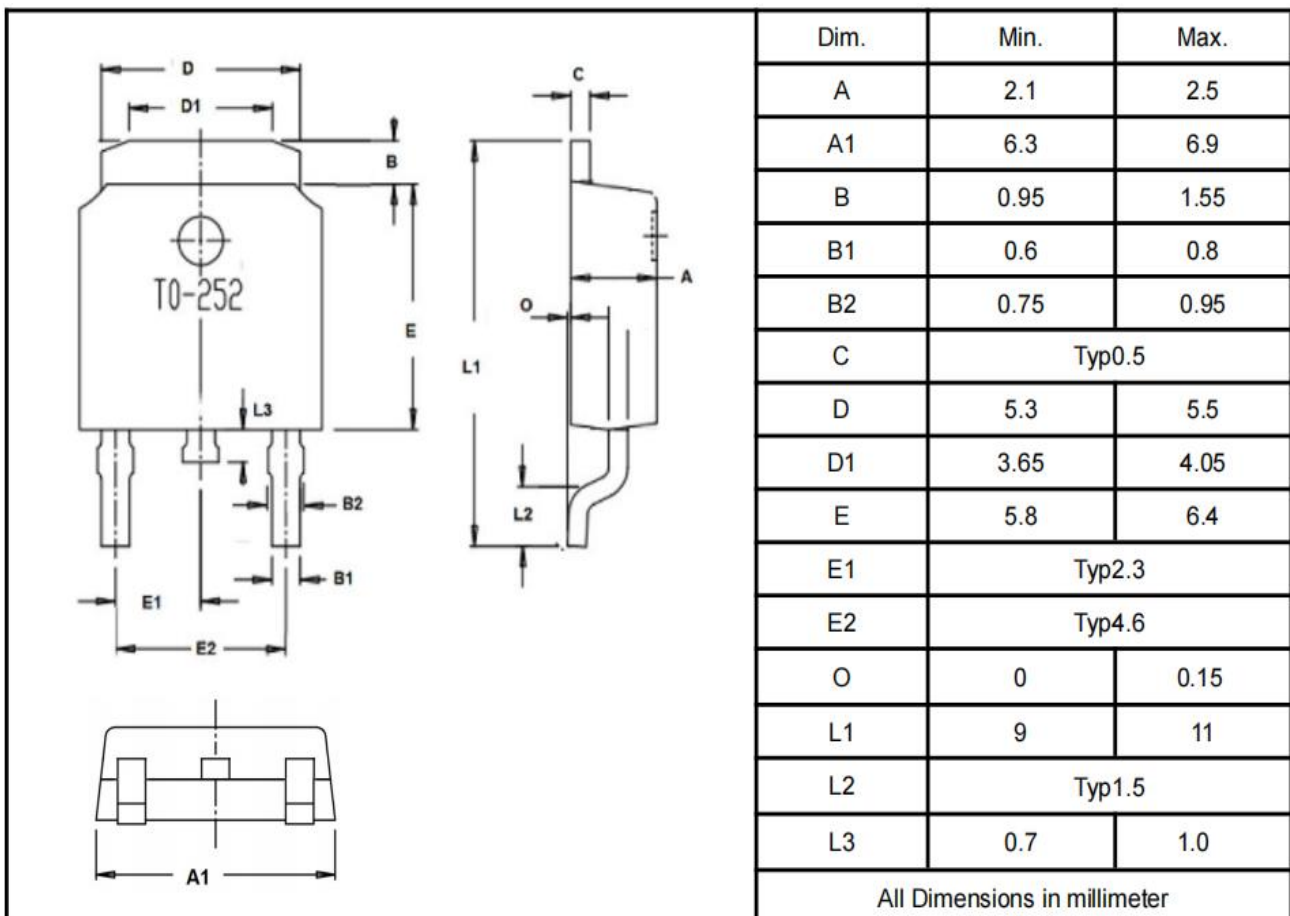


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

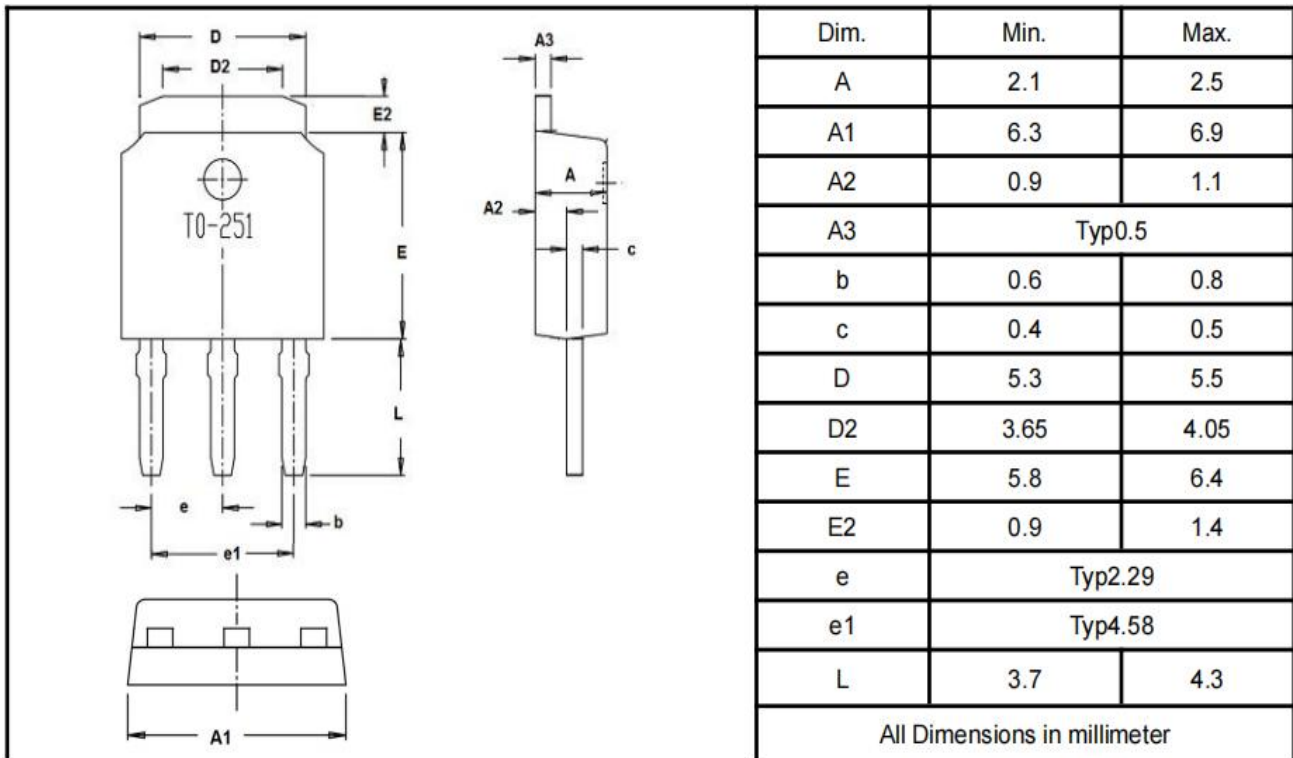
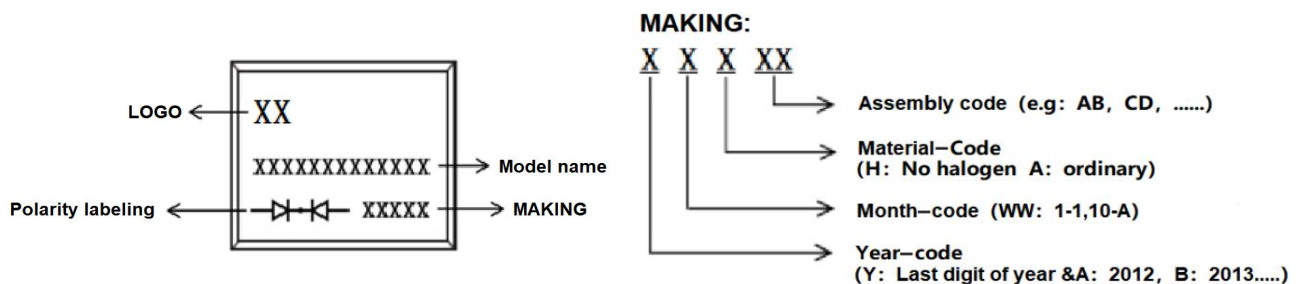


**Package Outline Dimensions millimeters**
**TO-220AB**

**TO-220F**


**Package Outline Dimensions millimeters**
**T0-263**

**T0-252**


**Package Outline Dimensions millimeters**

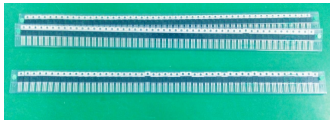
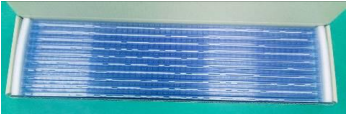







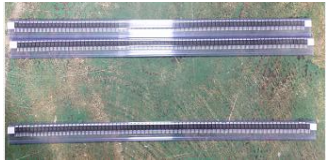


TO-251


**Marking on the body**

**Ordering information**

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MUR2020CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR2020FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR2020DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
MUR2020DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton
MUR2020CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	5000pcs/box 25000pcs/carton
MUR2020D	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/盘	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.