

### LOW VF SCHOTTKY RECTIFIER





TO-220AB/SCT

TO-220F/SFCT

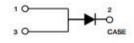




TO-263/SDC

TO-252/SCS





TO-262/SCR

#### **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 <sub>o</sub>	10A	
$V_{RRM}$	100V	
I <sub>FSM</sub>	280A	
$V_{F}$	0.62V	
T₃max	150℃	

#### **MECHANICAL DATA**

Case: Molded plasticPolarity: As markedMounting 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 at Ta=25°C unless otherwise specified			
Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Working Peak Reverse Voltage	orking Peak Reverse Voltage V <sub>RWM</sub> 100		V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Rectified Current	Ιο	10	Α
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	280	Α
Operating Temperature Range	T」	-50 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-50 to +150	°C
Typical Thermal Resistance (Note1)			
TO-220AB,TO-263,TO-252,TO-262	R <sub>0 JC</sub>	2	°C/W
TO-220F		4	

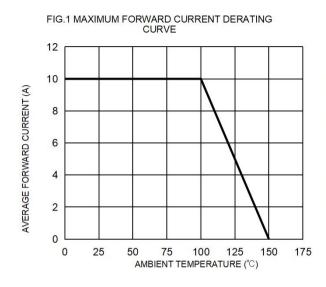
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

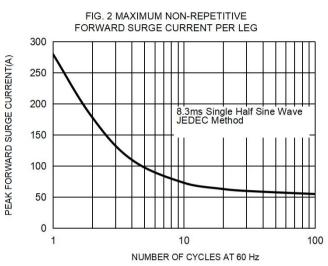
<b>Electrical Characteristics</b>	unless othe	rwise spe	cified		
Characteristics		Symbol Value			Unit
Forward Voltage Drop(Note2)			Тур.	Max.	
at 1 = 2 A	TA=25°C	1	0.49	-	
at I <sub>F</sub> =3A	TA=125°C	1	0.43	-	
at 1 = 5 A	TA=25°C	$V_{F}$	0.55	0.58	V
at I <sub>F</sub> =5A	TA=125°C	1	0.51	-	
at 1 = 40 A	TA=25°C	1	0.67	0.70	
at I <sub>F</sub> =10A	TA=125°C		0.62	-	
Maximum Bayana Cumant at 1/ -1001/	TA=25°C		5	50	μA
Maximum Reverse Current at V <sub>R</sub> =100V	TA=125°C	I <sub>R</sub>	4	-	mA

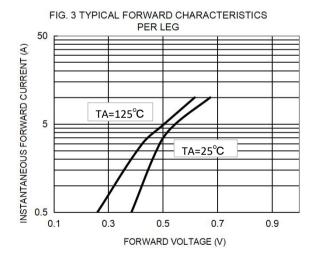
Note2:Pulse test: 300 µs pulse width, 1 % duty cycle

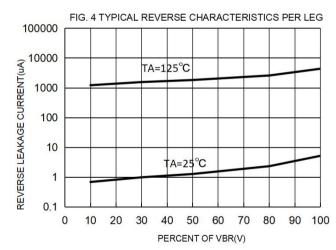


### RATINGS AND CHARACTERISTIC CURVES



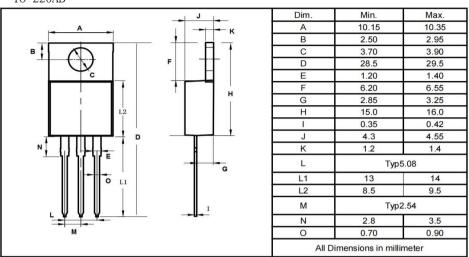




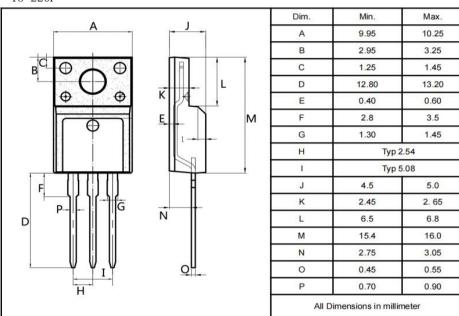


# Package Outline Dimensions millimeters

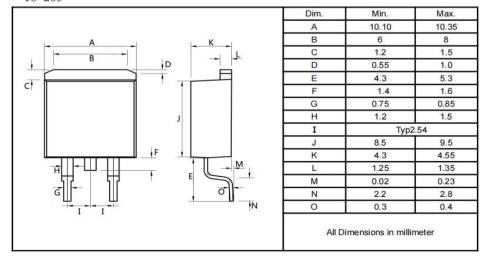
TO-220AB



TO-220F

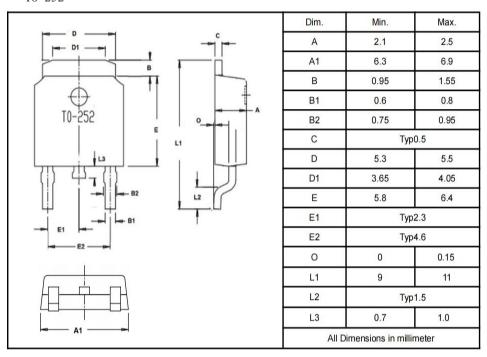


TO-263

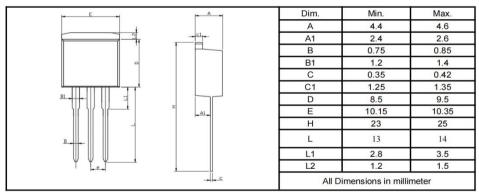


## Package Outline Dimensions millimeters

TO-252



TO-262



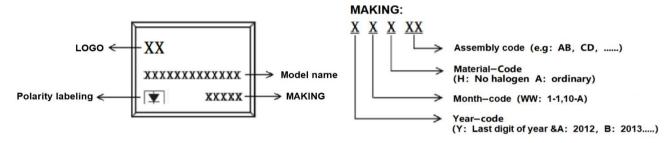
www.lxmicro.com 4 of 5 LingXun Rev:01



Ordering information				
Part Number	Package	Unit Weight	Base Quantity	Delivery mode
SBT10L100SCT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SBT10L100SFCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SBT10L100SDC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
SBT10L100SDC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton
SBT10L100SCS	TO-252	0.011oz(0.32g)	2500 pcs / reel	5000pcs/box 25000pcs/carton
SBT10L100SCR	TO-262	0.04oz(1.16g)	50 pcs / reel	1000pcs/box 5000pcs/carton

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

### Marking on the body



packing instruction				
PKG	最小包装	内盒	外箱	
TO-220AB TO-220F TO-263 TO-262			Mac   Mac	
	50pcs/管	1000pcs/盒	5000pcs/箱	
TO-263-R				
	800pcs/盘	1600pcs/盒	8000pcs/箱	
TO-252				
	2500pcs/盘	5000pcs/盒	25000pcs/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.