

### LOW VF SCHOTTKY RECTIFIER

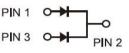




TO-220AB/CT

TO-220F/FCT





TO-263/DC

Primary Characteristic		
Ι <sub>ο</sub>	2*10A	
V <sub>RRM</sub>	150V	
I <sub>FSM</sub>	340A	
V <sub>F</sub>	0.65V	
T <sub>J</sub> max	175℃	

### **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 freqency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

### **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  $^\circ\!\!\!\!^\circ C$  maximum,10s  $\,$  per JESD 22-B106  $\,$

Maximum Ratings (Per L	.eg) at Ta=25	5°C unless	otherwise specified	
Characteristics		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	150	V
Working Peak Reverse Voltage		V <sub>RWM</sub>	150	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	150	V
Maximum Average Forward Rectified	Per Leg		10	٨
Current	Total	I <sub>O</sub>	20	A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I <sub>FSM</sub>	340	А
Operating Temperature Range		ΤJ	-40 to +175	°C
Storage Temperature Range		T <sub>STG</sub>	-40 to +150	°C
Typical Thermal Resistance (Note1)				
TO-220AB,TO-263		R <sub>θJC</sub>	2	°C/W
TO-220F		•	4	

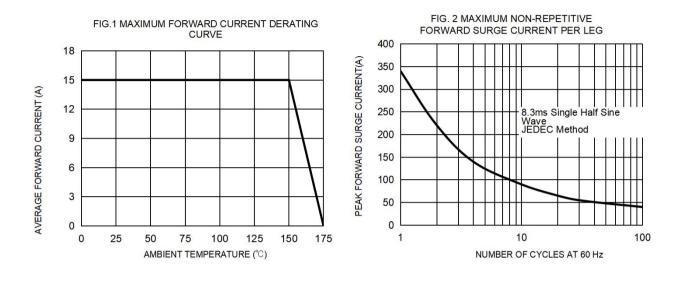
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

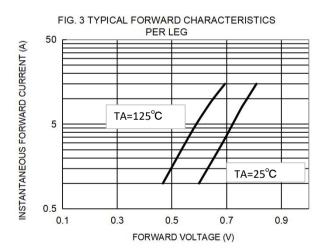
<b>Electrical Characteristics</b>	(Per Leg) u	nless othe	rwise spec	cified	
Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)			Тур.	Max.	
at I <sub>F</sub> =3A	TA=25°C		0.69	-	
at IF-3A	TA=125°C	V <sub>F</sub>	0.55	-	Ī
at I₅=5A	TA=25°C		0.72	-	V
I <sub>F</sub> -5A	TA=125°C		0.59	-	
at L = 10A	TA=25°C		0.78	0.83	
at I <sub>F</sub> =10A	TA=125°C		0.65	-	
Maximum Reverse Current at $V_{R}$ =150V	TA=25°C		0.14	0.5	μA
Maximum Reverse Current at V <sub>R</sub> -150V	TA=125°C	I <sub>R</sub>	155	-	μA

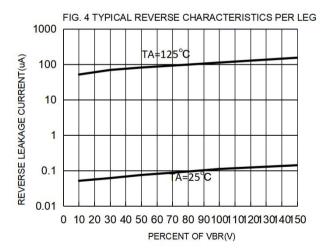
Note2:Pulse test: 300 µs pulse width, 1 % duty cycle



### RATINGS AND CHARACTERISTIC CURVES

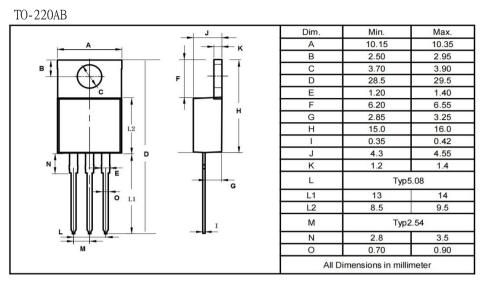




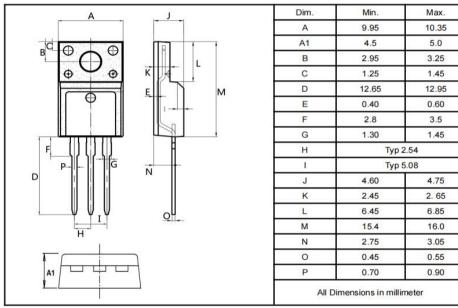




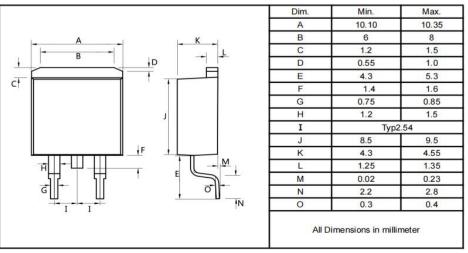
### Package Outline Dimensions millimeters



TO-220F

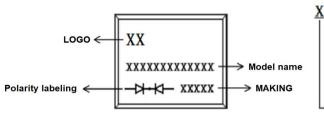


TO-263





#### MAKING:



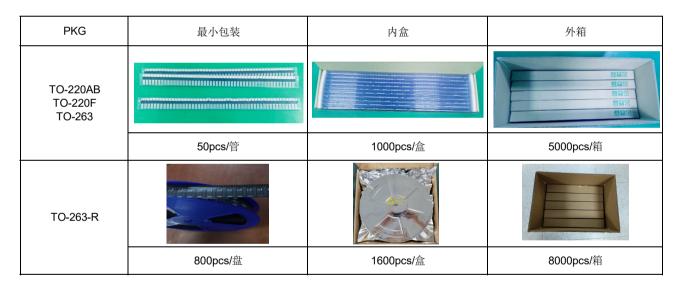
antino.	
<u>X X XX</u>	
$    \rightarrow$	Assembly code (e.g: AB, CD,)
	Material–Code (H: No halogen A: ordinary)
$ \longrightarrow $	Month-code (WW: 1-1,10-A)
$\longrightarrow$	Year-code (Y: Last digit of year &A: 2012, B: 2013)

### Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode	
SBT20V150CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
SBT20V150FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
SBT20V150DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
SBT20V150DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton	

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

### packing instruction



### 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.