

SBT10L100CT/FCT/DC

LOW VF SCHOTTKY RECTIFIER

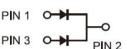




TO-220AB/CT

TO-220F/FCT





TO-263/DC

Primary Characteristic		
Ι _ο	2*5A	
V _{RRM}	100V	
I _{FSM}	180A	
V _F	0.64V	
T _J max	150 ℃	

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 Lo	eg) at Ta=25	5°C unless	otherwise specified	
Characteristics		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	Per Leg		5	۸
Current	Total	I _O	10	A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	180	А
Operating Temperature Range		ТJ	-40 to +150	°C
Storage Temperature Range		T _{STG}	-40 to +150	C°
Typical Thermal Resistance (Note1)				
TO-220AB,TO-263		R _{θJC}	2	°C/W
TO-220F		J -	4	
Note1: Thermal resistance from Junction	to coop por log mo	unted on bootei	ak	

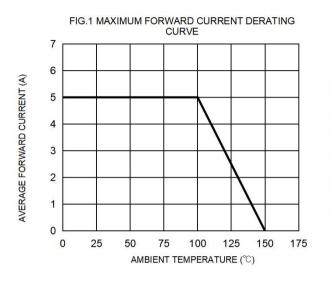
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (I	⊃er Leg) ur	nless othe	rwise speci	fied	
Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)			Тур.	Max.	
at I₅=1A	TA=25°C		0.45	-	
	TA=125°C		0.38	-	
ot 1 = 2 A	TA=25°C	V _F	0.58	0.62	V
at I _F =3A	TA=125°C		0.54	-	
at I _F =5A	TA=25°C		0.68	0.75	
	TA=125°C		0.64	-	
Maximum Reverse Current at V _R =100V	TA=25°C	1	2.2	10	μA
	TA=125°C	I _R	1.62	-	mA

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



RATINGS AND CHARACTERISTIC CURVES



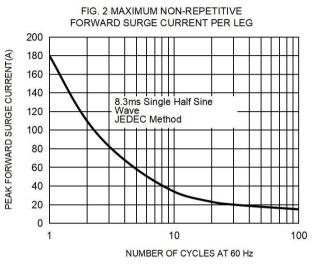
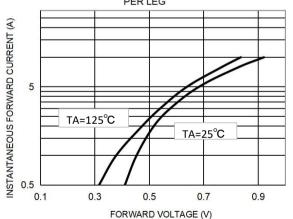
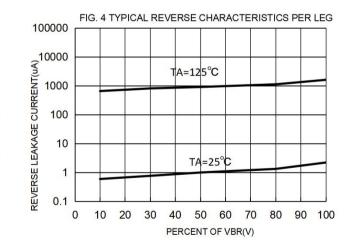


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

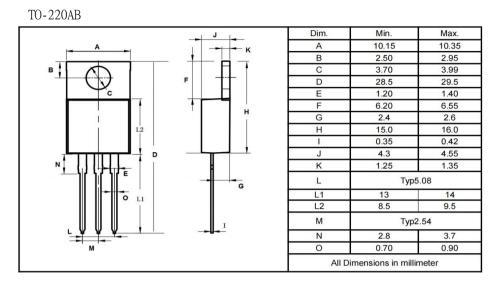




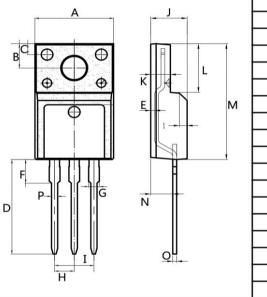


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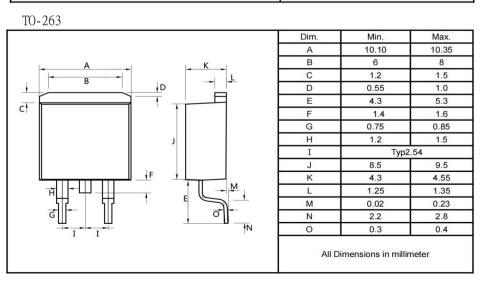
Package Outline Dimensions millimeters



TO-220F



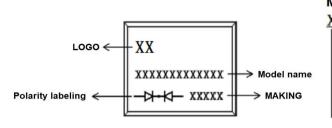
Min.	Max.	
9.95	10.35	
2.95	3.25	
1.25	1.45	
12.80 13.2		
0.40 0.6		
2.8	3.5	
1.30	1.45	
Typ 2.54		
Тур 5.08		
4.5	5.0	
2.45	2.65	
6.5 6.8		
15.4	16.0	
2.75 3.05		
0.45 0.55		
0.70	0.90	
	9.95 2.95 1.25 12.80 0.40 2.8 1.30 Typ 2 4.5 2.45 6.5 15.4 2.75 0.45	





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Marking on the body



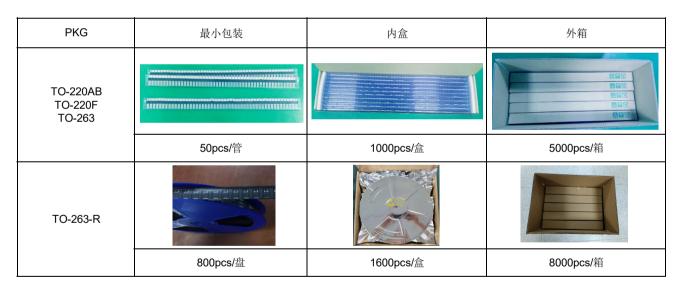
MAKING: XXXXXX		
	\rightarrow	Assembly code (e.g: AB, CD,)
	→	Material–Code (H: No halogen A: ordinary)
	→	Month-code (WW: 1-1,10-A)
	→	Year-code (Y: Last digit of year &A: 2012, B: 2013)

Ordering information

Ordening information			
Part Number	Package	Base Quantity	Delivery mode
SBT10L100CT	TO-220AB	50 pcs / tube	1000pcs/box 5000pcs/carton
SBT10L100FCT	TO-220F	50 pcs / tube	1000pcs/box 5000pcs/carton
SBT10L100DC	TO-263	50 pcs / tube	1000pcs/box 5000pcs/carton
SBT10L100DC-R	TO-263	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.