

## SCHOTTKY BARRIER RECTIFIER





TO-220AB/CT



TO-220F/FCT



- Low forward voltage
- High current capability

**APPLICATIONS** 

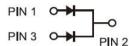
on-board DC/DC conerters

- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and







TO-263/DC

PIN 1	O N	7
		$\vdash$
PIN 3	<b>→</b>	PIN 2

• 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

Primary Characteristic			
I <sub>o</sub>	2*10A		
$V_{RRM}$	200V		
I <sub>FSM</sub>	350A		
$V_{F}$	0.67V		
T₃max	175℃		
Assembly code	IW		

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	Per Leg		10	۸	
Current	Total	Io	20	Α	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I <sub>FSM</sub>	350	Α	
Operating Temperature Range		T」	175	°C	
Storage Temperature Range		T <sub>STG</sub>	-40 to +175	°C	
Typical Thermal Resistance (Note1)					
TO-220AB,TO-263		$R_{\theta JC}$	2	°C/W	
TO-220F			4		

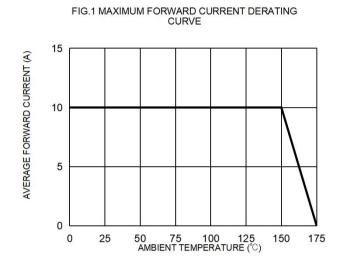
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

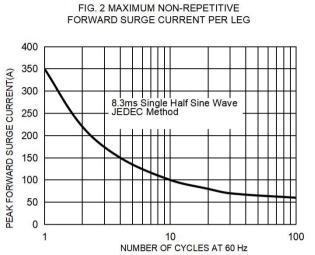
Electrical Characteristics (Per Leg) unless otherwise specified					
Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)			Тур.	Max.	
at I <sub>F</sub> =3A	TA=25°C	V <sub>F</sub>	0.72	-	
	TA=125°C		0.55	-	V
at I <sub>F</sub> =5A	TA=25°C		0.75	-	
	TA=125°C		0.60	-	
at I <sub>F</sub> =10A	TA=25°C		0.80	0.87	
	TA=125°C		0.67	-	l
Maximum Reverse Current at V <sub>R</sub> =200V	TA=25°C	I <sub>R</sub>	0.1	0.5	μΑ
	TA=125°C		160	-	μΑ

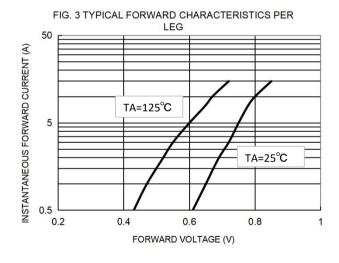
Note2:Pulse test: 300 µs pulse width, 1 % duty cycle

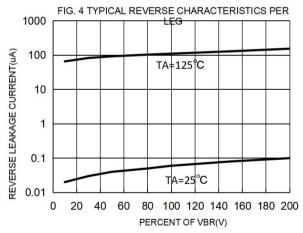


## RATINGS AND CHARACTERISTIC CURVES



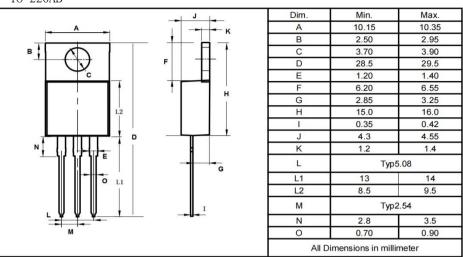




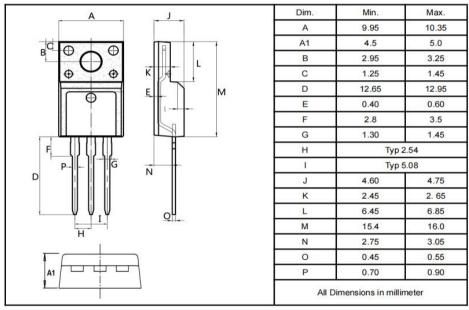


# Package Outline Dimensions millimeters

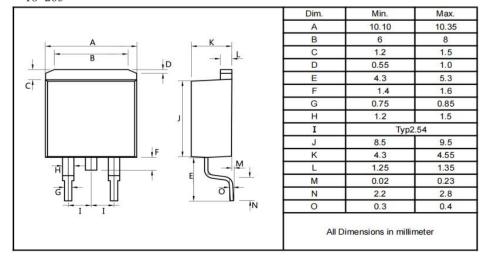
TO-220AB



TO-220F

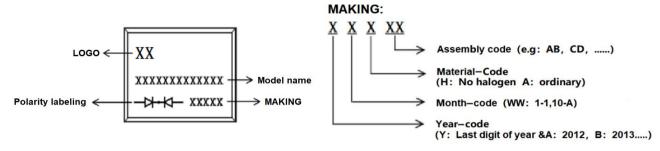


TO-263





# Marking on the body



Ordering information					
Part Number	Package	Unit Weight	Base Quantity	Delivery mode	
HBT20L200CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
HBT20L200FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
HBT20L200DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
HBT20L200DC-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

PKG	最小包装	内盒	外箱	
TO-220AB TO-220F TO-263			PGP PGP PGP PGP PGP	
	50pcs/管	1000pcs/盒	5000pcs/箱	
TO-263-R				
	800pcs/盘	1600pcs/盒	8000pcs/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.