

Primary Characteristic

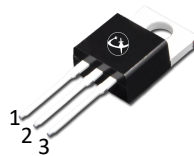
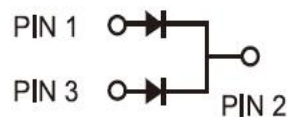
I_O	2*20A
V_{RRM}	200V
I_{FSM}	400A
V_F	0.84V
T_{jmax}	175°C

FEATURES

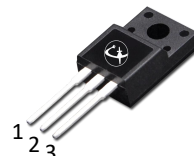
- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

APPLICATIONS

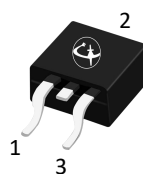
Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters



TO-220AB/CT



TO-220F/FCT



TO-263/DC

Product specification classification

Part Number	Package	Mode Name	Pack
HBT40L200CT	TO-220AB	HBT40L200CT	Tube
HBT40L20FCT	TO-220F	HBT40L20FCT	Tube
HBT40L20DC	TO-263	HBT40L20DC	Tube
HBT40L20DC-R	TO-263	HBT40L20DC-R	Tape

Maximum Ratings at Ta=25°C unless otherwise specified

Parameter		Symbol	Value	Unit
Maximum Repetitive Peak Reverse		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	I_O	20	A
	Total		40	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	400	A
Operating Temperature Range		T_J	175	°C
Storage Temperature Range		T_{STG}	-40~150	°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 unless otherwise specified

Parameter		Symb	Value		Unit
Forward Voltage Drop(Note2)		V_F	Typ.	Max.	V
at $I_F=1A$	TA=25°C		0.51	0.58	
	TA=125°C		0.41	-	
at $I_F=5A$	TA=25°C		0.69	-	
	TA=125°C		0.55	-	
at $I_F=10A$	TA=25°C		0.76	0.85	
	TA=125°C		0.63	-	
at $I_F=20A$	TA=25°C		0.85	0.9	
	TA=125°C		0.72	0.82	
Maximum Reverse Current at $V_R=200V$	TA=25°C	I_R	0.85	2	μA
	TA=125°C		0.91	1.5	mA

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

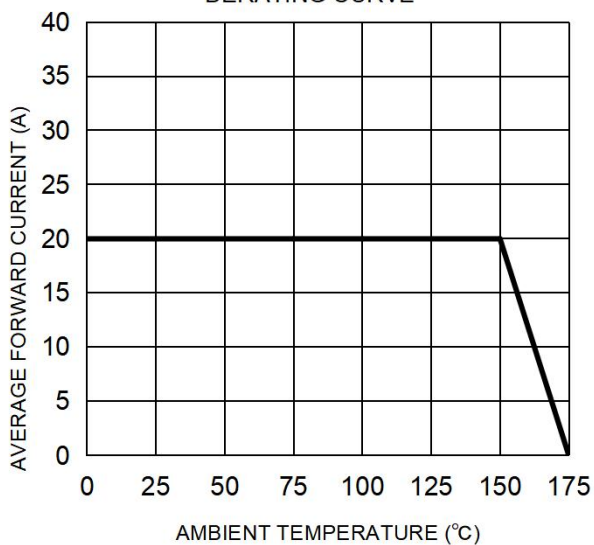


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

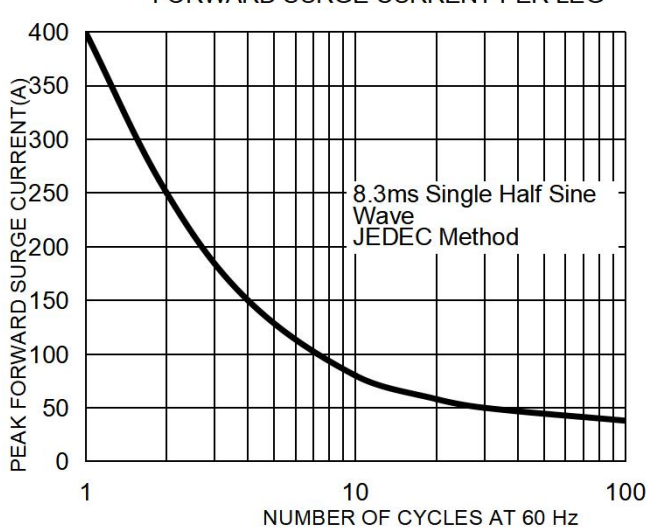


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

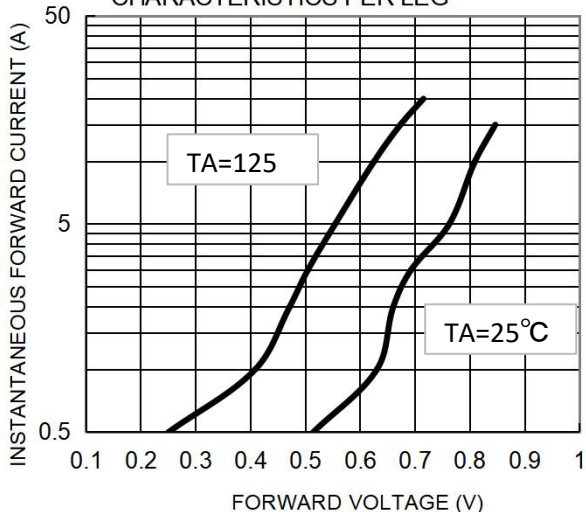
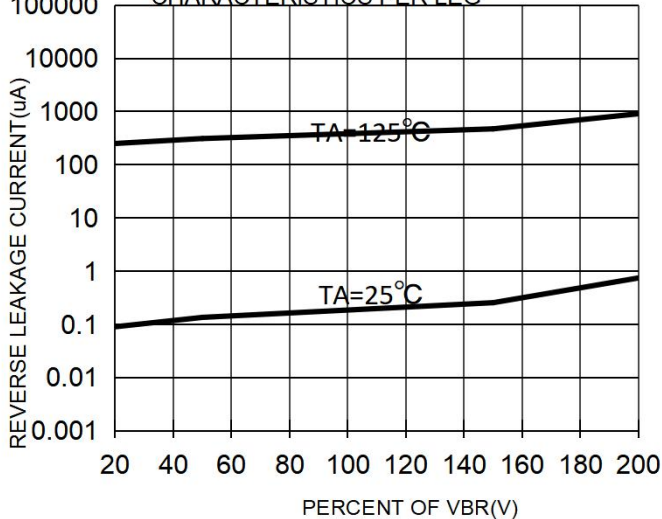
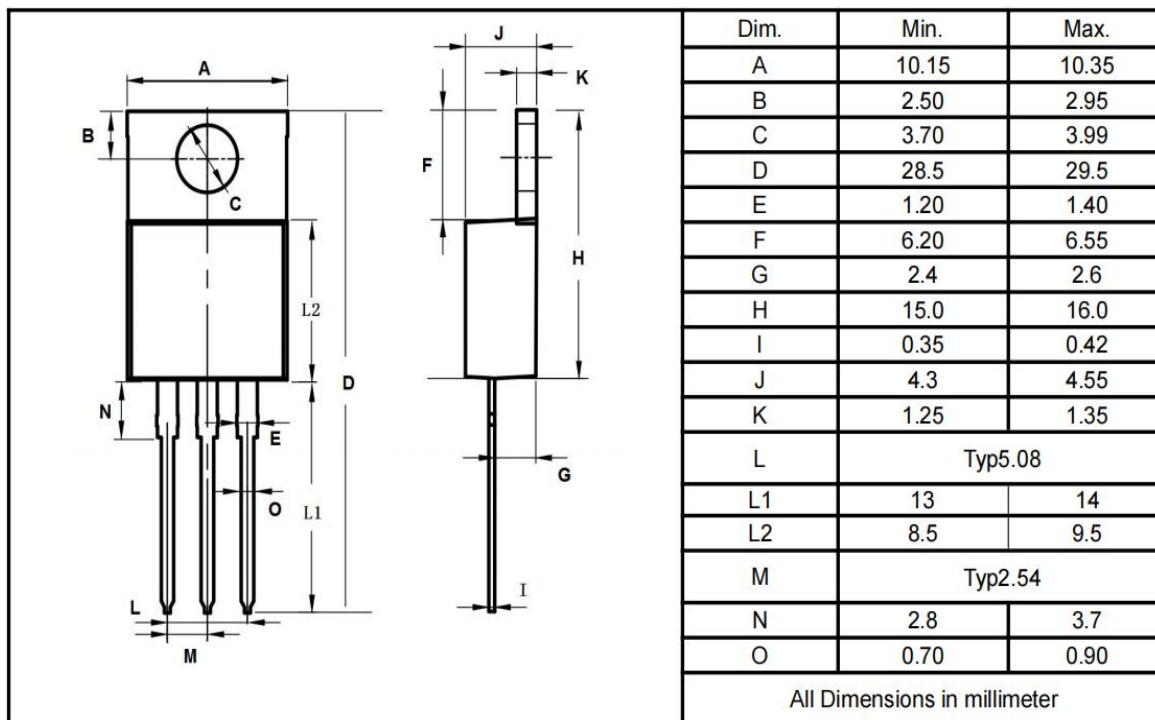


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

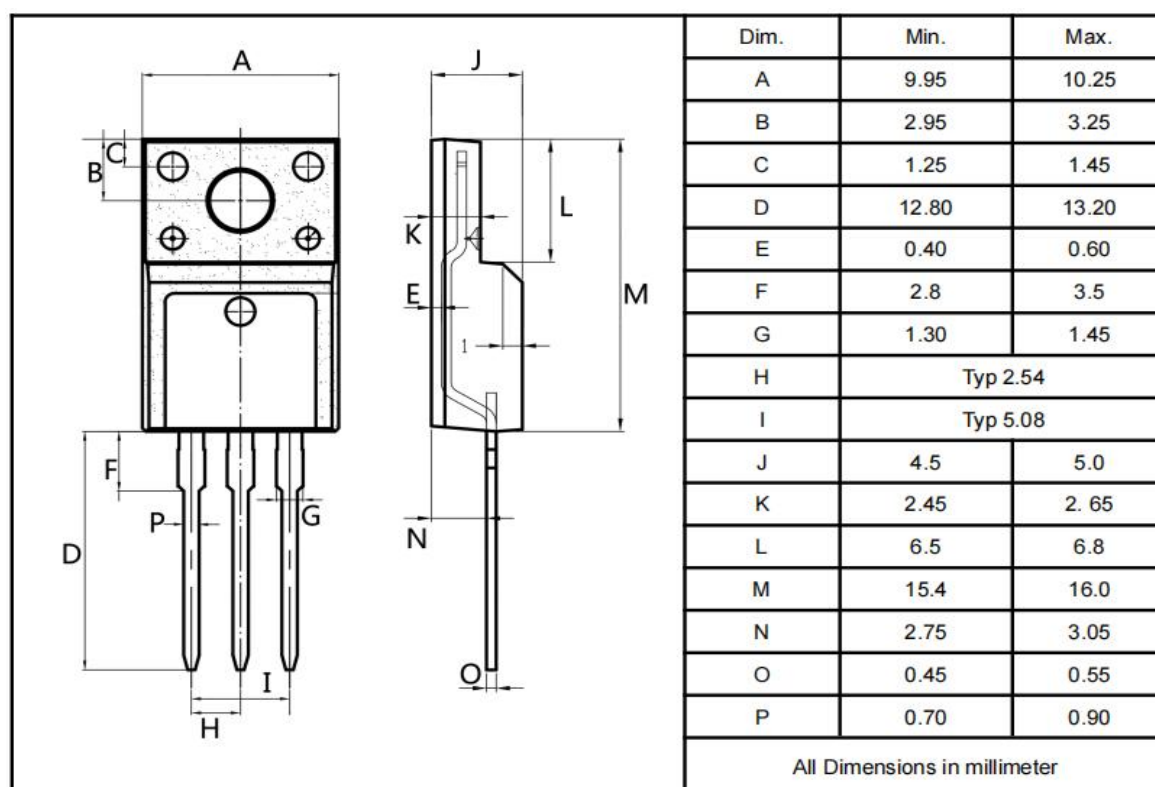


Package Outline Dimensions millimeters

TO-220AB

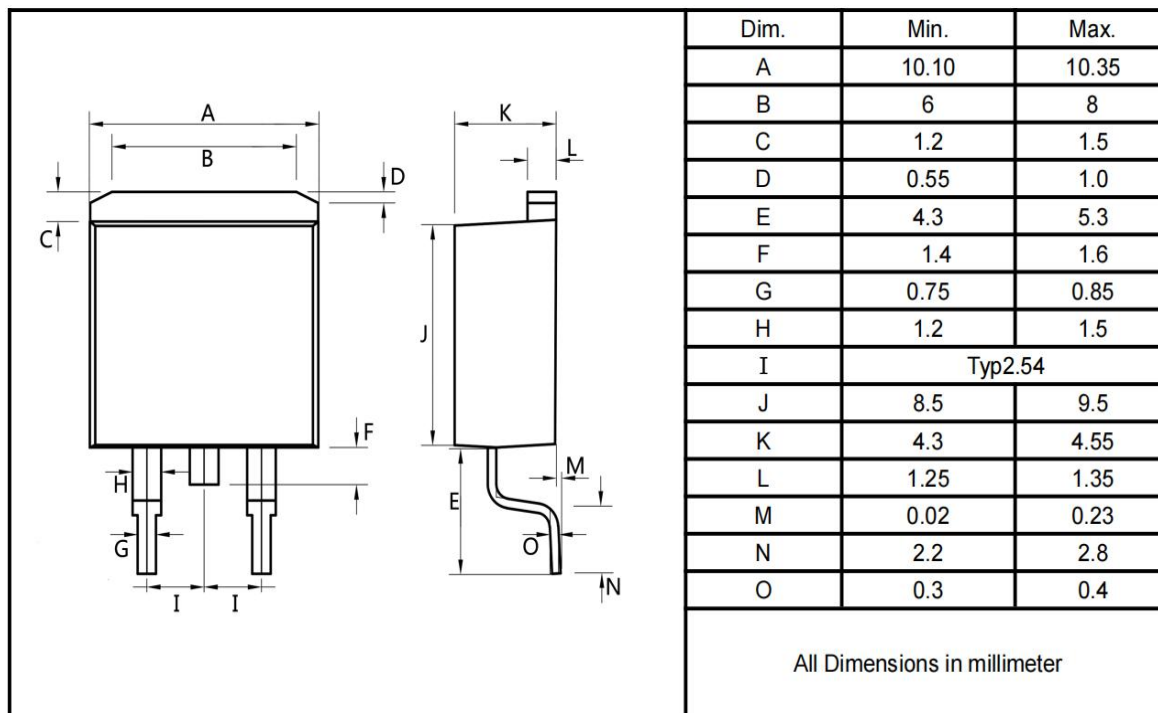


TO-220F

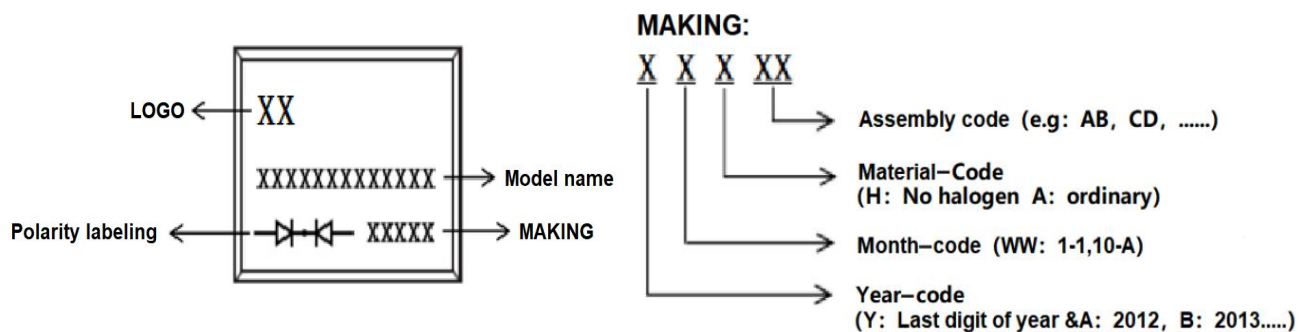


Package Outline Dimensions millimeters

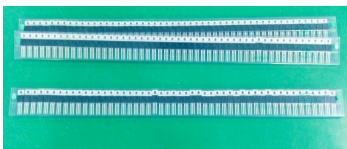
TO-263



Marking on the body



packing instruction

PKG	Minimal Package	Box	carton
TO-220AB TO-220F TO-263			
	50PCS/tube	1000pcs/box	5000pcs/carton
TO-263			
	800pcs/disk	1600pcs/disk	8000pcs/carton



HBT40L200CT/FCT/DC

SCHOTTKY BARRIER RECTIFIER

Notice

All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.

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.

LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.

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Revision History

Rev	Changes	Date
1.0	First version	2026-1-20