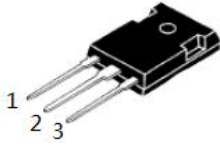
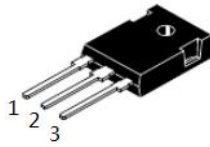
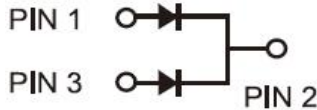


SCHOTTKY BARRIER RECTIFIER


TO-247/PT



TO-247S/PTS


FEATURES

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


RoHS
 COMPLIANT

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_O	2*20A
V_{RRM}	150V
I_{FSM}	450A
V_F	0.71V
$T_{j,max}$	175°C

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°C maximum,10s per JESD 22-B106

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RWM}	150	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current	Per Leg	20	A
	Total	40	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	450	A
Operating Temperature Range	T_J	175	°C
Storage Temperature Range	T_{STG}	-40 to +175	°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2	°C/W

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)	V_F	Typ.	Max.	V
		at $I_F=10A$	0.76	
	at $I_F=10A$	0.63	-	
	at $I_F=20A$	0.83	0.88	
	at $I_F=20A$	0.71	-	
	at $I_F=20A$	0.71	-	
Maximum Reverse Current at $V_R=150V$	I_R	TA=25°C	5	µA
		TA=125°C	3	mA

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

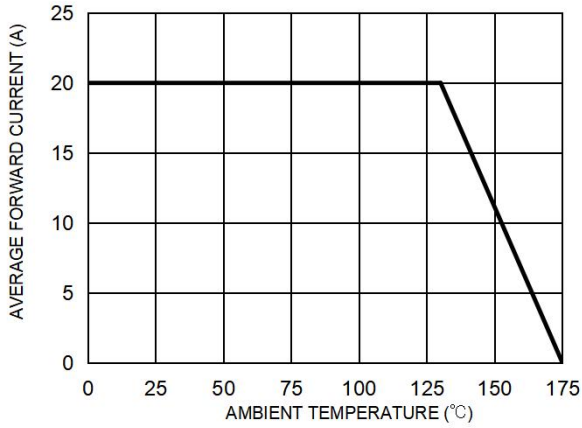


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

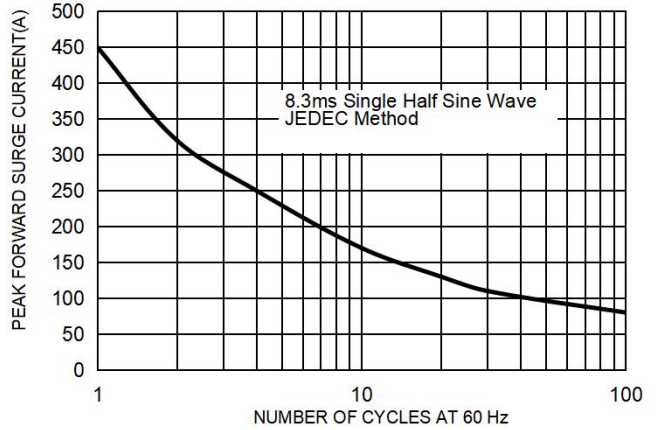


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

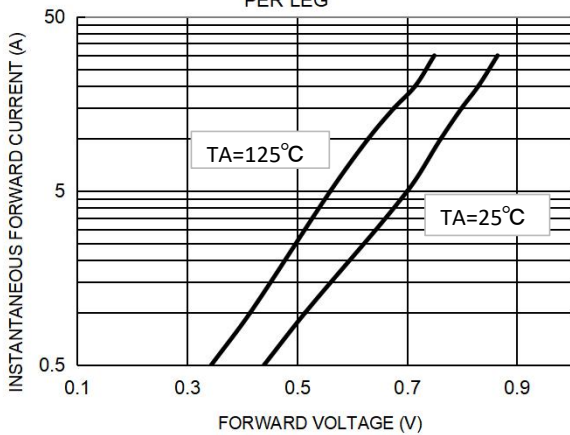
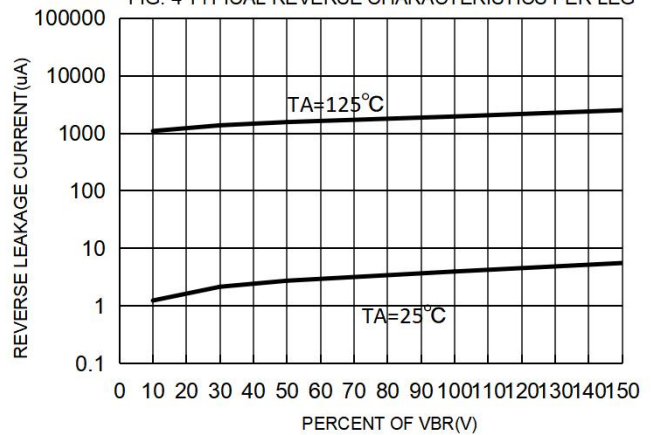
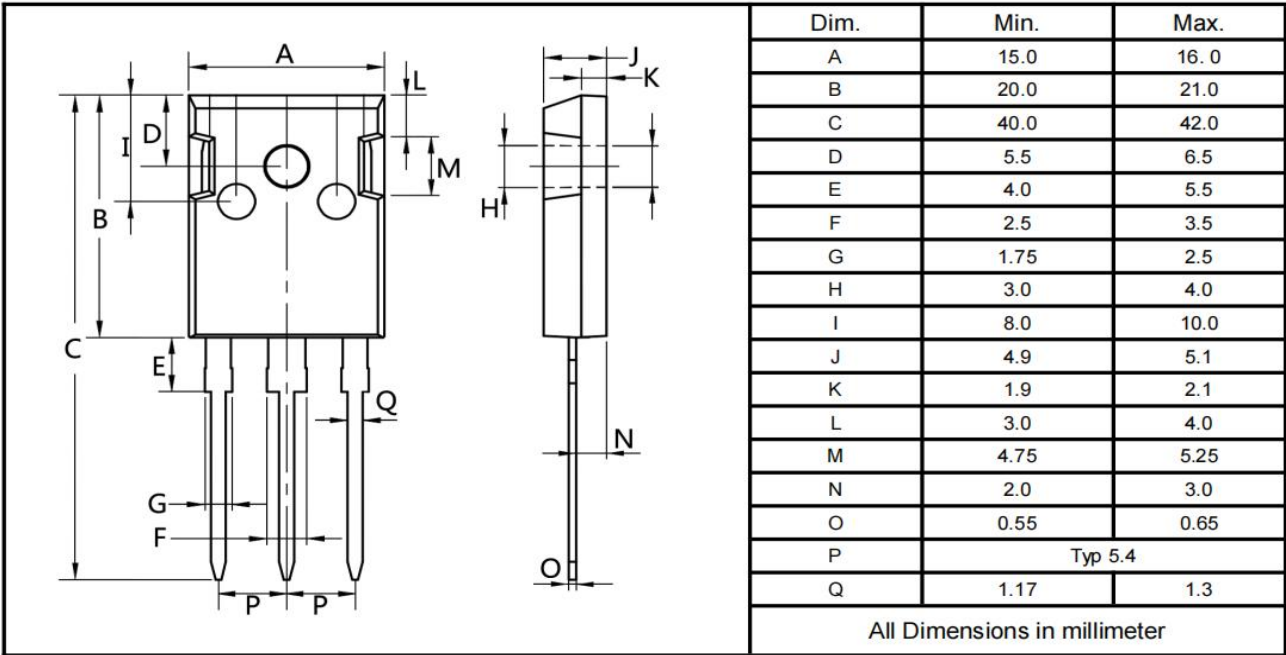


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

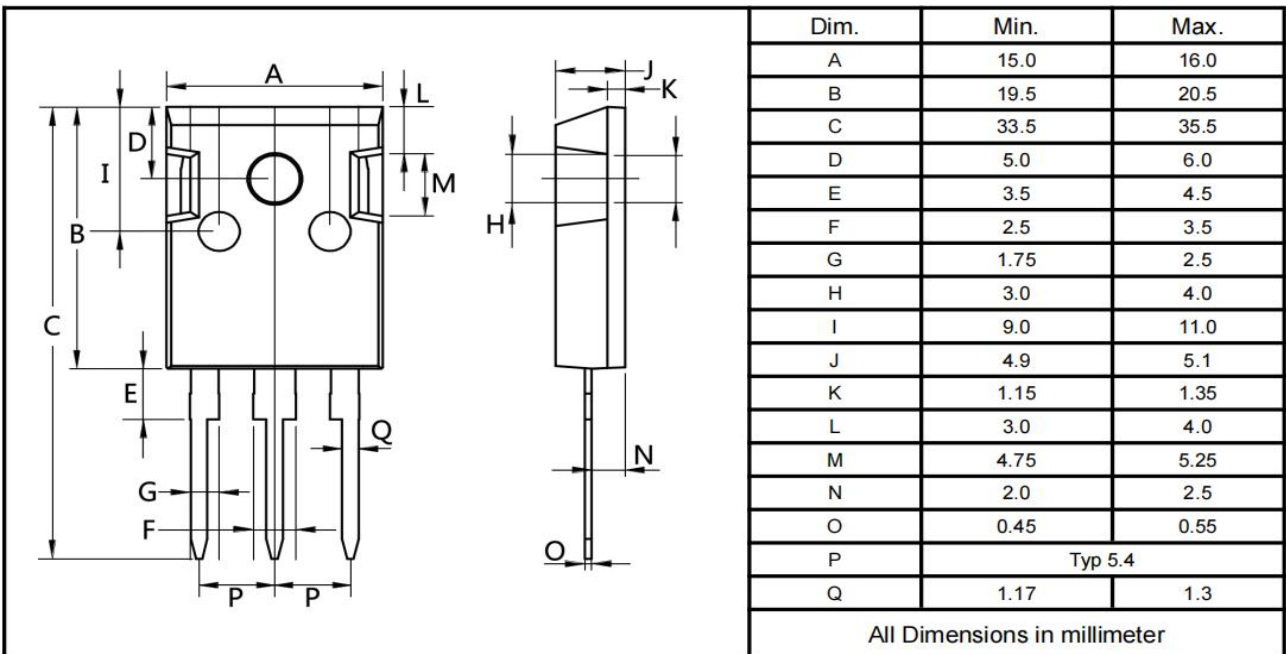


Package Outline Dimensions millimeters

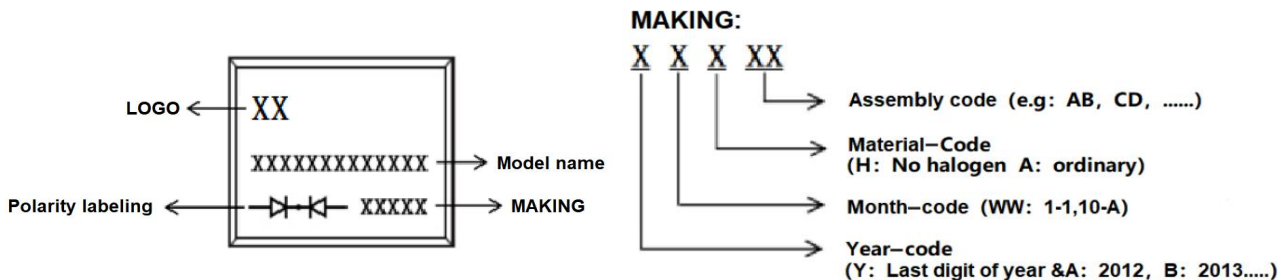
TO-247



TO-247S



Marking on the body

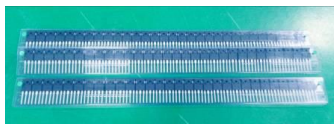




Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
MBR40150PT-B	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 2400pcs/carton
MBR40150PTS-B	TO-247S	0.158oz(4.48g)	30 pcs / tube	600pcs/box 2400pcs/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-247 TO-247S			
	30PCS/管	600pcs/盒	2400pcs/箱

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.