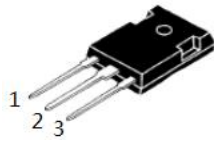
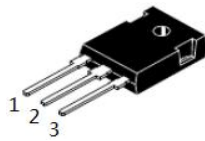




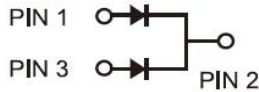
LOW VF SCHOTTKY RECTIFIER



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



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}	45V
I_{FSM}	250A
V_F	0.43V
T_{jmax}	150°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}	45	V
Working Peak Reverse Voltage	V_{RWM}	45	V
Maximum DC Blocking Voltage	V_{DC}	45	V
Maximum Average Forward Rectified Current	Per Leg	IO	20
		Total	40
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	250	A
Operating Temperature Range	T_J	-50 to +150	°C
Storage Temperature Range	T_{STG}	-50 to +150	°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)		Typ.	Max.	V	
		at $I_F=5A$	TA=25°C		0.37
	TA=125°C	0.27	-		
at $I_F=10A$	TA=25°C	0.41	-		
	TA=125°C	0.33	-		
at $I_F=20A$	TA=25°C	0.47	0.55		
	TA=125°C	0.43	-		
Maximum Reverse Current at $V_R=45V$	TA=25°C	90	200		µA
	TA=125°C	22	-		mA

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



RATINGS AND CHARACTERISTIC CURVES

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

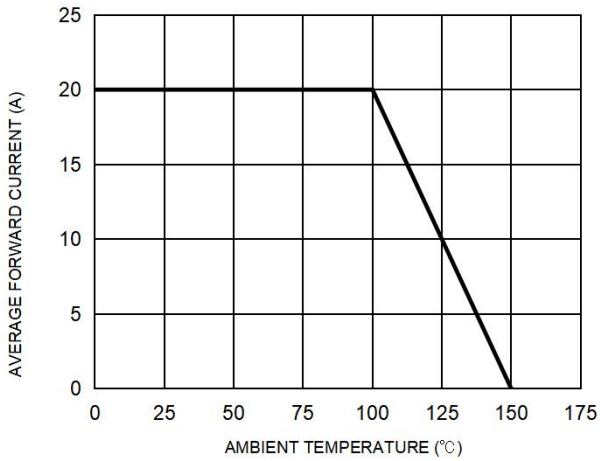


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

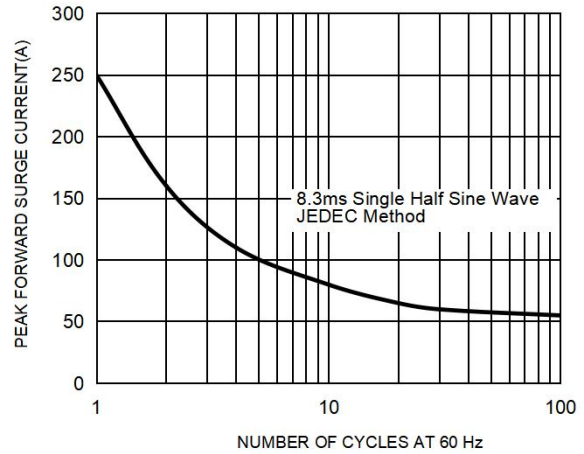


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

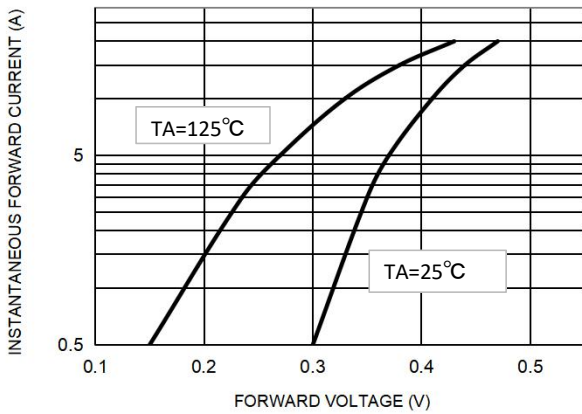
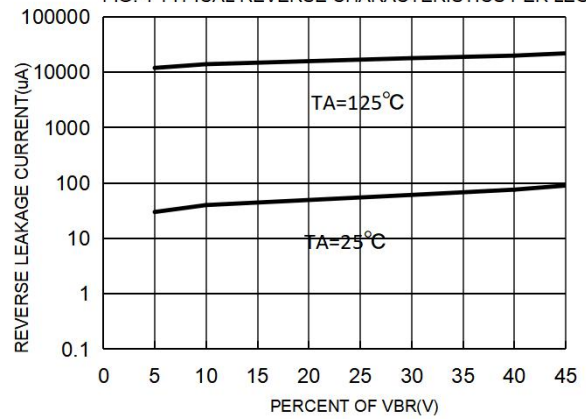


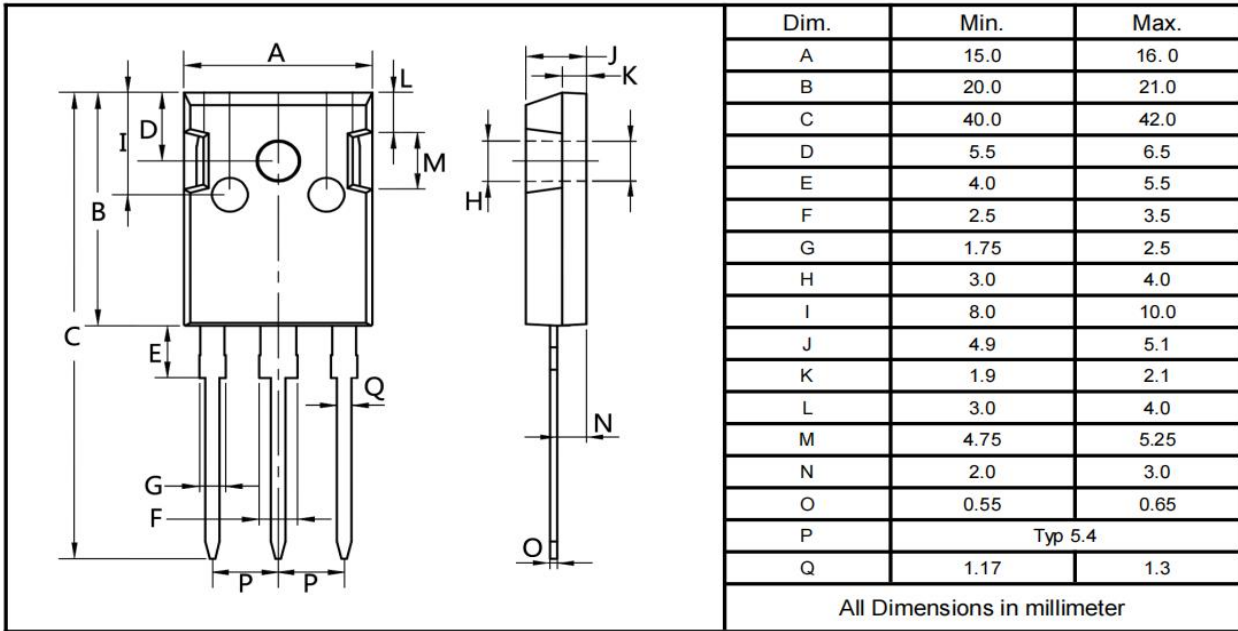
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



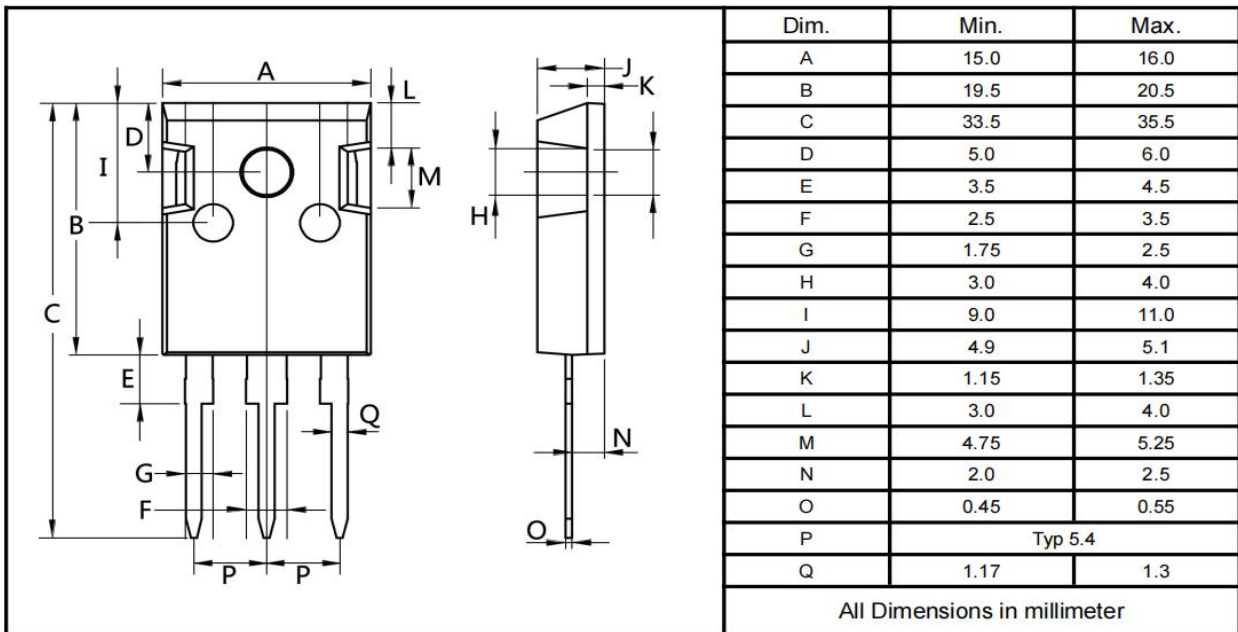


Package Outline Dimensions millimeters

TO-247

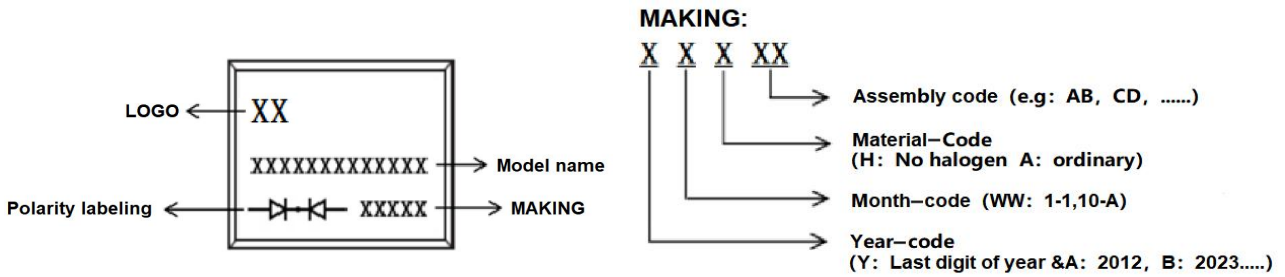


TO-247S





Marking on the body

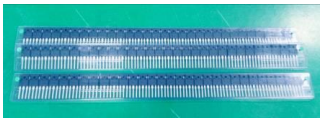




Ordering information

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
SBT40L45PT	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 2400pcs/carton
SBT40L45PTS	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

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.