

Primary Characteristic

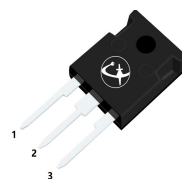
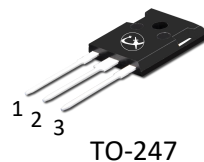
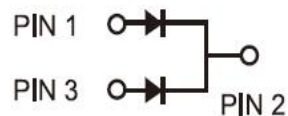
I_O	30A*2
V_{RRM}	100V
I_{FSM}	380A
V_F	0.59V
T_{jmax}	150℃

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 frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters



TO-247S

Product specification classification

Part Number	Package	Mode Name	Pack
SBT60U100PT	TO-247	SBT60U100PT	Tube
SBT60U100PTS	TO-247S	SBT60U100PTS	Tube

Maximum Ratings at Ta=25°C unless otherwise specified

Parameter		Symbol	Value	Unit
Maximum Repetitive Peak Reverse		V_{RRM}	100	V
Working Peak Reverse Voltage		V_{RWM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current	Per Leg	I_O	30	A
	Total		60	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	380	A
Operating Temperature Range		T_J	150	°C
Storage Temperature Range		T_{STG}	-40~150	°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 unless otherwise specified

Parameter		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V_F	Typ.	Max.	V
at $I_F=15A$	TA=25°C		0.53	-	
	TA=125°C		0.45	-	
at $I_F=20A$	TA=25°C		0.62	-	
	TA=125°C		0.53	-	
at $I_F=30A$	TA=25°C		0.68	0.77	
	TA=125°C		0.59	-	
Maximum Reverse Current at $V_R=100V$	TA=25°C	I_R	13	80	μA
	TA=125°C		1.8	-	mA

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

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

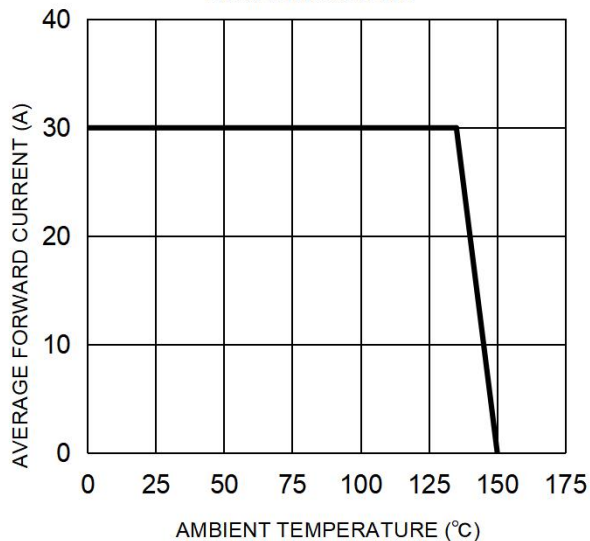


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

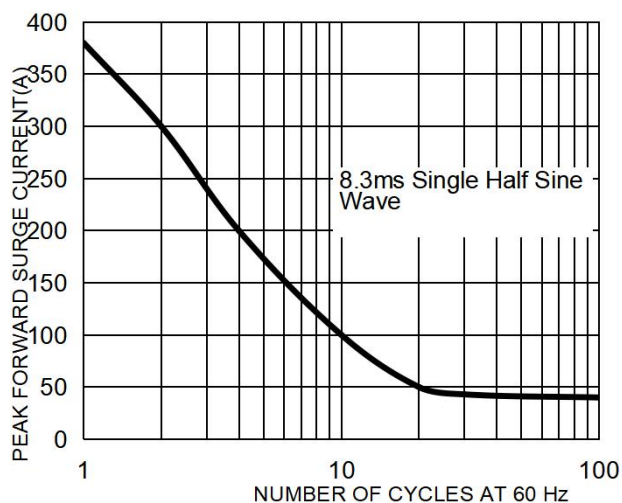


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

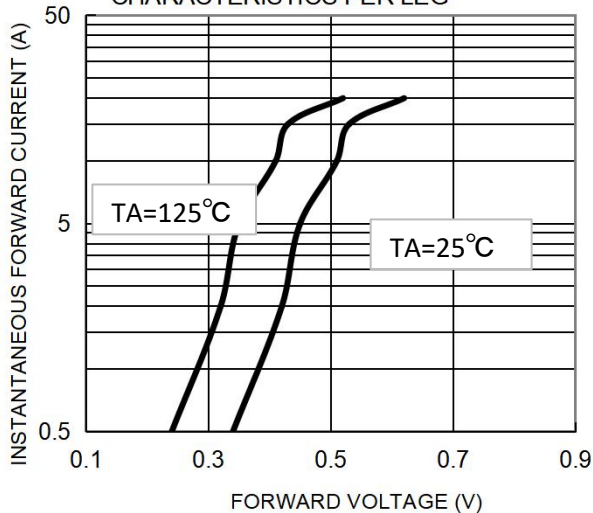
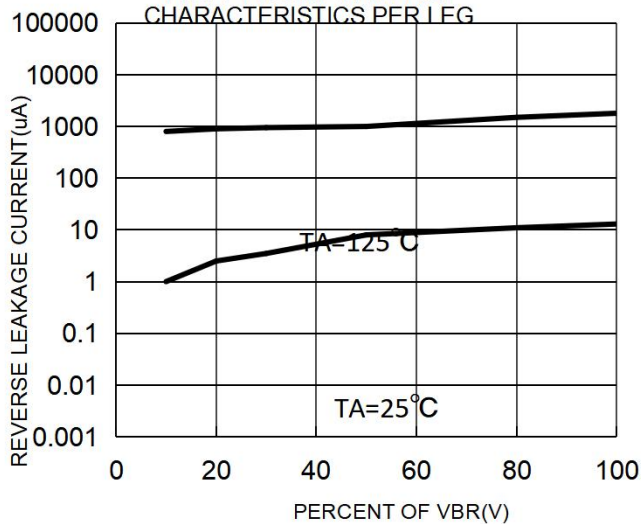
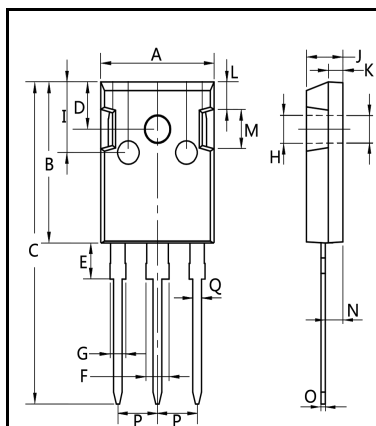


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Package Outline Dimensions millimeters

T0-247



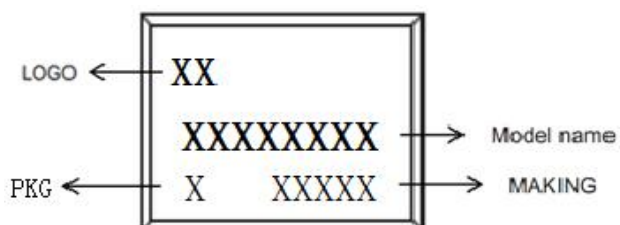
Dim.	Min.	Max.
A	15	16
B	20	21
C	40	42
D	5.5	6.5
E	4	5.5
F	2.5	3.5
G	1.75	2.5
H	3	4
I	8	10
J	4.9	5.1
K	1.9	2.1
L	3	4
M	4.75	5.25
N	2	3
O	0.55	0.65
P	Typ 5.4	
Q	1.17	1.3

All Dimensions in millimeter

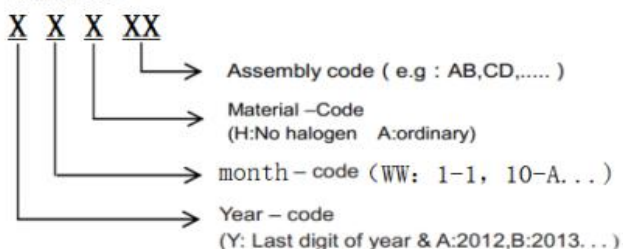
Dim.	Min.	Max.
A	15.0	16.0
B	19.5	20.5
C	33.5	35.5
D	5.0	6.0
E	3.5	4.5
F	2.5	3.5
G	1.75	2.5
H	3.0	4.0
I	9.0	11.0
J	4.9	5.1
K	1.15	1.35
L	3.0	4.0
M	4.75	5.25
N	2.0	2.5
O	0.45	0.55
P	Typ 5.4	
Q	1.17	1.3

All Dimensions in millimeter

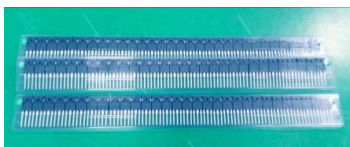
Marking on the body



MAKING:



packing instruction

PKG	Minimal Package	Box	carton
TO-247 TO-247S			
	30pcs/disk	600pcs/disk	3000pcs/carton



SBT60U100PT/PTS

LOW VF SCHOTTKY 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	2026-2-5