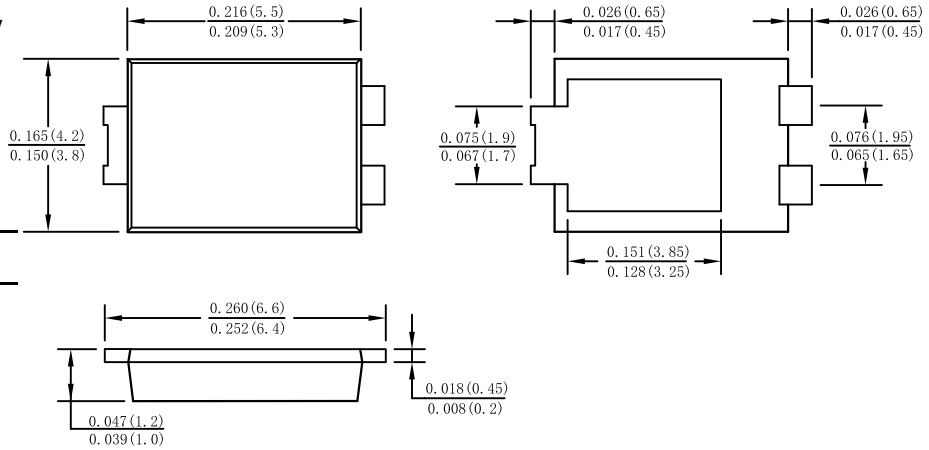
SB1560L THRU SB15100L

15.0A Surface Mount Schottky Barrier Rectifiers

Features

- · Schottky Barrier Chip
- · High Thermal Reliability
- · Patented Super Barrier Rectifier Technology
- · High Forward Surge Capability
- · Ultra Fow Power Loss,High Efficiency
- · Excellent High Temperature Stability
- · Plastic material-UL flammability 94V-0

Case: TO-277B



Mechanical Data

- · Case: TO-277B, molded plastic
- · Terminals:Plated Leads Solderable per MIL-STD-202,Method 208
- · Meet MSL level 1,per J-STD-020, LF Maximum peak of 260 ℃
- · Polarity:Cathode Band
- · Mounting Position:Any
- · Marking:Type Number
- · Lead Free:For RoHS/Lead Free Version

dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics @T_A =25℃ unless otherwise specified

Single Phase,half wave,60Hz,resistive or inductive load.For capacitive load,derate current by 20%.

Parameter	Symbol	SB1560L	SB15100L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC blocking voltage	V_{RRM} V_{RWM} V_{DC}	60	100	V
RMS Rectified Voltage	$V_{R(RMS)}$	42	70	V
Average Rectified Output Current (Note1)	IF(AV)	15.0		A
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2)	I_{FSM}	250		A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	259.375		A^2s
Forward Voltage Drop T_A =25 ℃ @IF=15A	V_{FM}	0.55	0.75	V
Peak Reverse Curent T_A =25℃ At Rated DC Blocking Voltage T_A =100℃	I_R	0.3 15		mA
Typical Thermal Resistance Junctionto Ambient	$R_{\theta JA}$ $R_{\theta JL}$	110 3.5		℃/W
Operating junction temperature range	T_J	-55 to +150		℃
storage temperature range	T_{STG}	-55 to +150		℃

Note:1.Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.
2.Fr-4pcb.2oz.Copper,minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.

Fig.1 - Forward Current Derating Curve

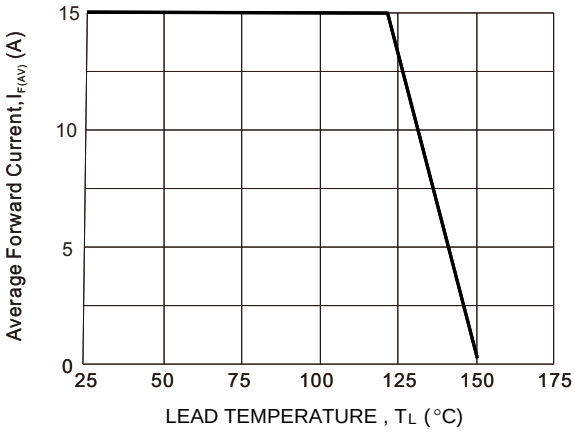


Fig. 2 Typical Forward Characteristics (per leg)

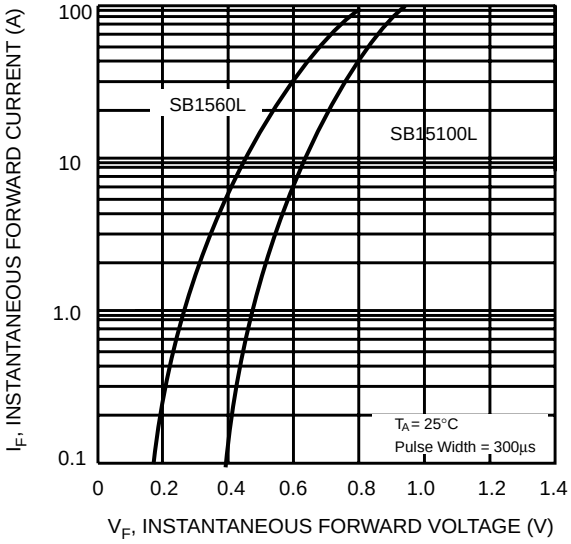


Fig. 3 Maximum Peak Forward Surge Current (per leg)

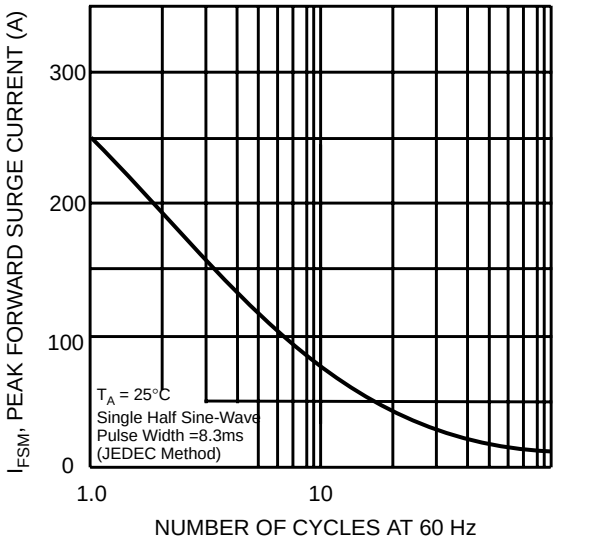


Fig4: Typical Reverse Characteristics

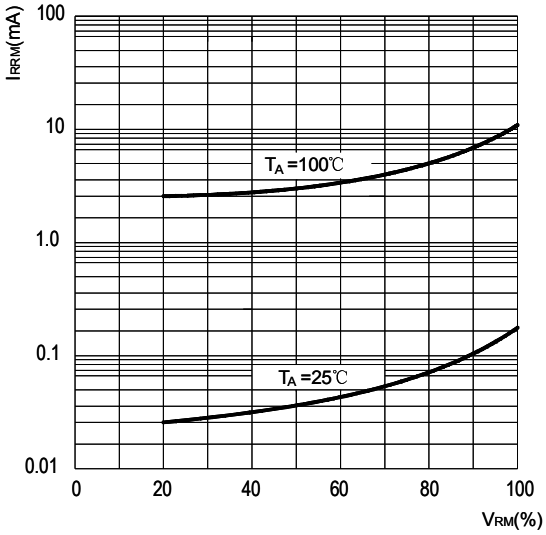
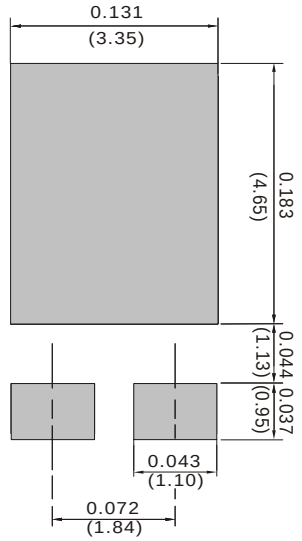


FIG.5 MOUNTING PAD LAYOUT



Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from XINNUO
- XINNUO reserves the right to make changes to this document and its products and specifications
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.

  XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown here in are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.