

# SB1045L THRU SB10100L

10.0A Surface Mount Schottky Barrier Rectifiers

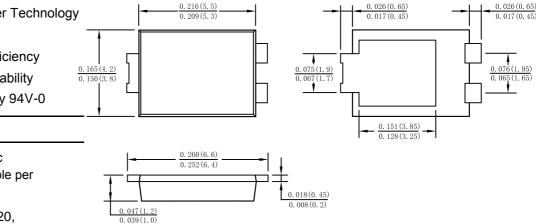
#### Features

- · 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

#### **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 °C
- · Polarity:Cathode Band
- · Mounting Position:Any
- · Marking:Type Number
- · Lead Free:For RoHS/Lead Free Version

#### Case: TO-277B



dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub> =25 °C unless otherwise specified

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

Parameter	Symbol	SB1045L	SB1050L	SB1060L	SB1080L	SB10100L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC blocking voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>DC</sub>	45	50	60	80	100	v
RMS Rectified Voltage	V <sub>R(RMS)</sub>	32	35	42	56	70	V
Average Rectified Output Current	IF(AV)	10					А
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method)	I <sub>F</sub> SM	150					A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	²t	93.375					A <sup>2</sup> s
Forward Voltage Drop T <sub>A</sub> =25 °C @IF=10A	Vгм	0.50 0.55 0.75			75	V	
Typical Junction Capacitance (Note1)	Cj	650 420 280		0	pF		
Peak Reverse Curent $T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $T_A = 100^{\circ}C$	lr	0.3 15					mA
Typical Thermal Resistance Junctionto Ambient (Note2)	Røja Røjl	80 10					°C/W
Operating junction temperature range	TJ	-55 to +150					°C
storage temperature range	Тѕтс	-55 to +150					°C

Note:1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

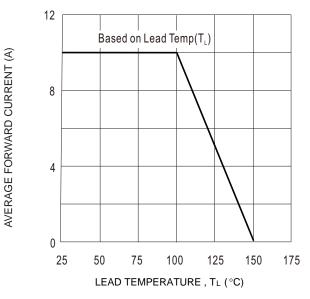
2.Fr-4pcb.2oz.Copper, minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.

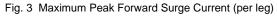


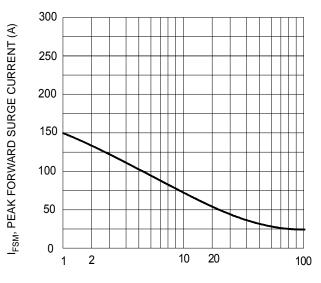
## SB1045L THRU SB10100L

10.0A Surface Mount Schottky Barrier Rectifiers

#### Fig.1 - Forward Current Derating Curve

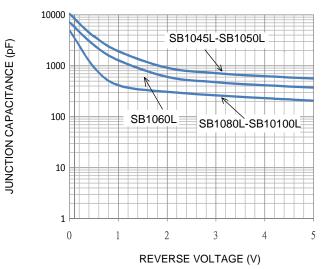


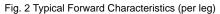


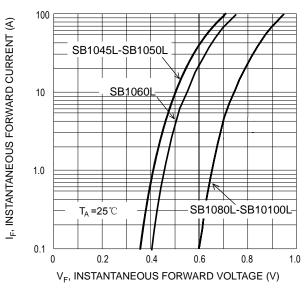


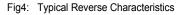
NUMBER OF CYCLES AT 60 Hz

Fig. 5 Typical Junction Capacitance









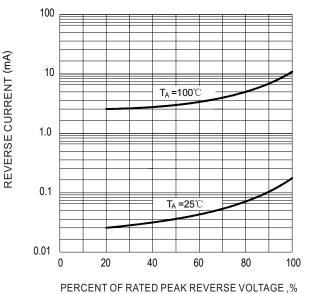
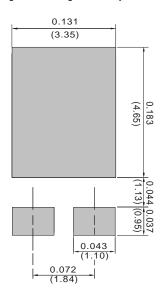


Fig. 6 Mounting PAD Layout





## **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 ris k andagree 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.

### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Schottky Diodes & Rectifiers category:

Click to view products by DIYI manufacturer:

Other Similar products are found below :

MA4E2039 MA4E2508M-1112 MBR0530L-TP MBR10100CT-BP MBR1545CT MMBD301M3T5G RB160M-50TR BAS16E6433HTMA1 BAS 3010S-02LRH E6327 BAT 54-02LRH E6327 IDL02G65C5XUMA1 NSR05F40QNXT5G NSVR05F40NXT5G NTE555 JANS1N6640 SB07-03C-TB-H SK310-T SK33A-TP SK34B-TP SS3003CH-TL-E PDS3100Q-7 GA01SHT18 CRS10I30A(TE85L,QM MA4E2501L-1290 MBRB30H30CT-1G JANTX1N5712-1 SB007-03C-TB-E SK33B-TP SK35A-TP SK38B-LTP NTE505 NTSB30U100CT-1G VS-6CWQ10FNHM3 CRG04(T5L,TEMQ) ACDBA1100LR-HF ACDBA1200-HF ACDBA240-HF ACDBA3100-HF CDBQC0530L-HF ACDBA260LR-HF ACDBA1100-HF MA4E2502L-1246 10BQ015-M3/5BT 10BQ060-M3/5BT NRVB130LSFT1G CRS08TE85LQM PMAD1108-LF B120Q-13-F 1N5819T-G B0530WSQ-7-F