

## SR1045L THRU SR10100L

10.0A Surface Mount Schottky Barrier Rectifiers

0.151(3.85)

0. 128 (3. 25)

#### **Features**

· Schottky Barrier Chip

· High Thermal Reliability

· Patented Super Barrier Rectifier Technology

· High Forward Surge Capability

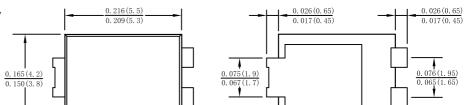
· Ultra Fow Power Loss, High Efficiency

· Excellent High Temperature Stability

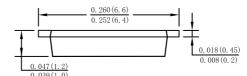
. plastic material-UL flammability 94V-0

#### **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	SR1045L	SR1050L	SR1060L	SR1080L	SR10100L	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$						
Working Peak Reverse Voltage	$V_{RWM}$	45	50	60	80	100	V
DC blocking voltage	$V_{DC}$						
RMS Rectified Voltage	$V_{R(RMS)}$	31.5	35	42	56	70	V
Average Rectified Output Current	IF(AV)	10					Α
Non-Repetitive Peak Forward Surge8.3ms							
Single Half Sine-Wave Superimposed on rated	IFSM	275					Α
load(JEDEC Method)							
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t	313.844					A <sup>2</sup> s
Forward Voltage Drop T <sub>A</sub> =25°C @ IF=10A	Vғм	0.44	0.45	0.48 0.70		.70	V
Peak Reverse Curent $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage $T_A = 100^{\circ}\text{C}$	lR	0.3 15					mA
Typical Thermal Resistance	Rеја	80					°C/W
Junctionto Ambient	Røjl	15					
Operating junction temperature range	TJ	-55 to +150					°C
storage temperature range	Тѕтс	-55 to +150					°C

version:06 1 of 3



## **SR1045L THRU SR10100L**

10.0A Surface Mount Schottky Barrier Rectifiers

Fig. 1 Forward Current Derating Curve

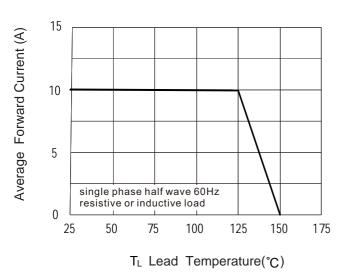


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

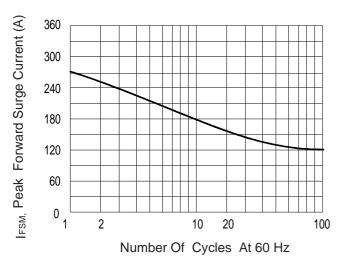


Fig.5 Mounting PAD Layout

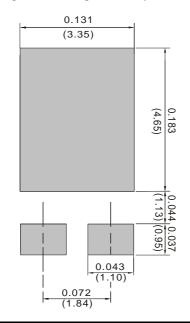


Fig. 2 Typ. Forward Characteristics

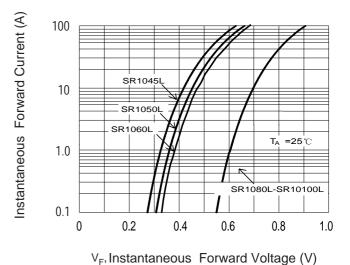
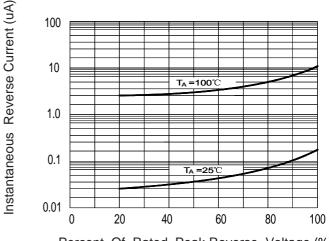


Fig.4 Typical Reverse Chracteristics



Percent Of Rated Peak Reverse Voltage (%)

version:06 2 of 3



# **SR1045L THRU SR10100L**

10.0A Surface Mount Schottky Barrier Rectifiers

### **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.

version:06 3 of 3