



# SCHOTTKY BARRIER RECTIFIER

## SB220 ~ SB2100

### Schottky Barrier Rectifier

#### Features

- Guarding for overvoltage protection
- Low forward voltage
- Low power loss for high efficiency
- High surge capability
- High temperature soldering guaranteed: 250°C/10 seconds, 0.373" (9.5mm) lead length
- RoHS and REACH Compliance



DO204AC  
(DO-15)



RoHS  
COMPLIANT

#### Mechanical Data

Case:	Transfer molded plastic
Polarity:	Color band denots cathode end
Epoxy:	UL94V-0 rate flame retardant
Lead:	Plated axial lead, solderable per MIL-STD-202E method 208C
Weight:	0.014 ounce, 0.39 gram

#### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	SB220	SB230	SB240	SB250	SB260	SB280	SB2100	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V	
VRMS	Max RMS Voltage	14	21	28	35	42	56	70	V	
VDC	Max DC Blocking Voltage	20	30	40	50	60	80	100	V	
I(AV)	Max Average Forward Rectified Current, 0.375" (9.5mm) lead length	2.0							A	
IFSM	Peak Forward Surge Current	50							A	JEDEC method
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150, -55 to +150							°C	
Rθ-JA	Typical Thermal Resistance	40							°C/W	Note 2

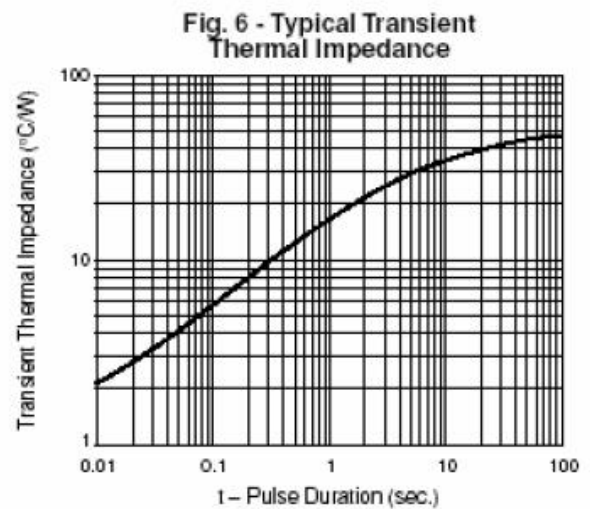
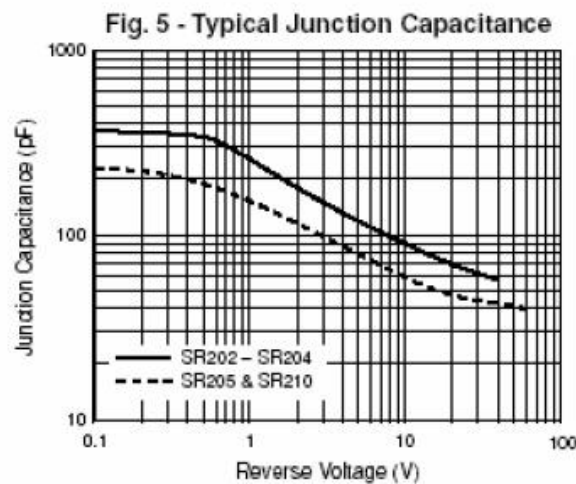
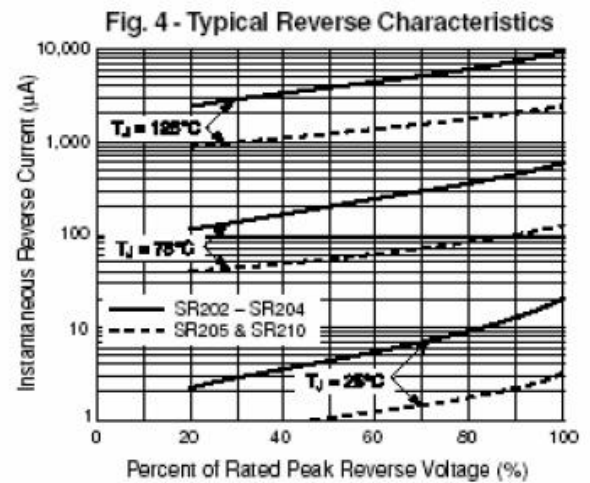
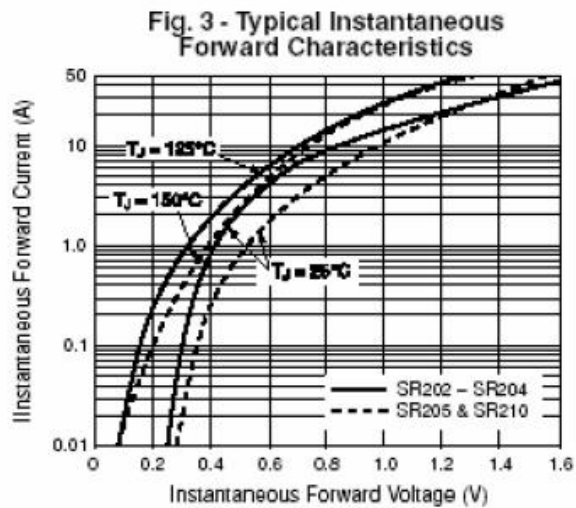
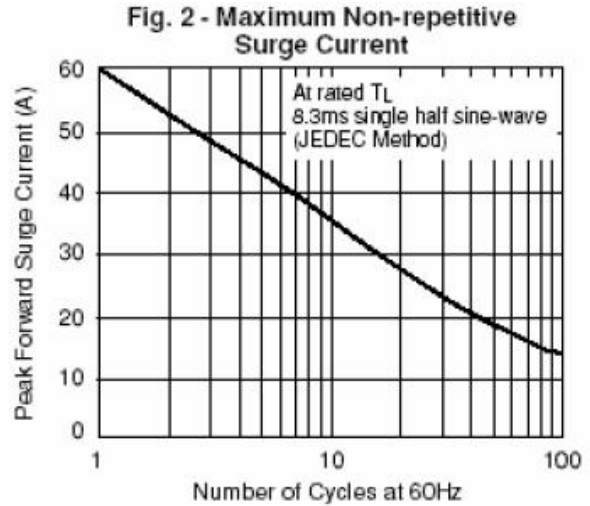
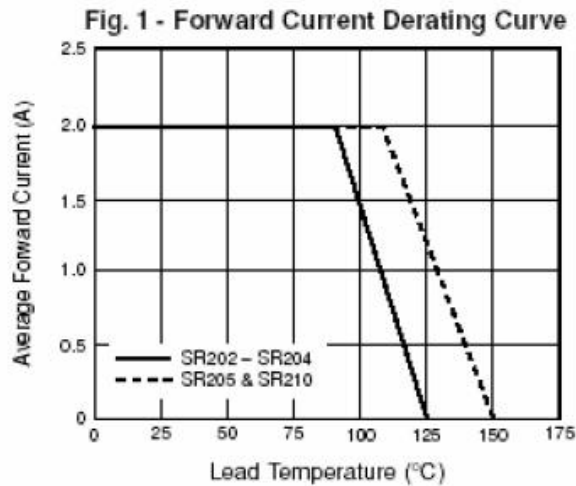
#### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	SB220	SB230	SB240	SB250	SB260	SB280	SB2100	Unit	Conditions
V <sub>F</sub>	Max Instantaneous Forward Voltage	0.55	0.75			0.85			V	2.0A (Note 1)
I <sub>R</sub>	Max DC Reverse Current at Rated DC Blocking Voltage	2.0							mA	T <sub>A</sub> =25°C
		20								T <sub>A</sub> =100°C
C <sub>J</sub>	Typical Junction Capacitance	170							pF	Measured at 1.0MHz / 4.0V

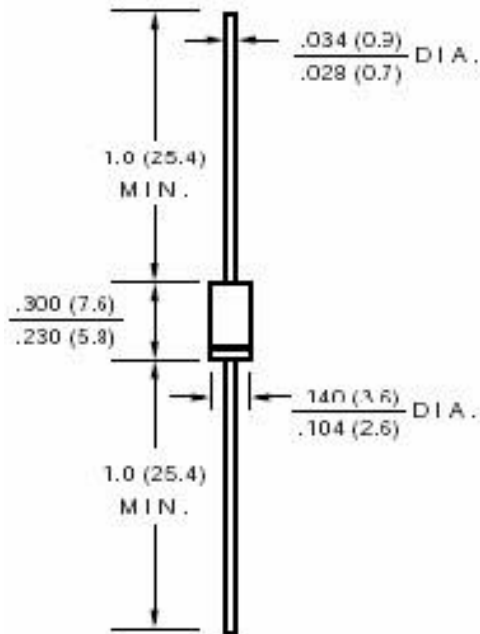
Note:

1. Pulse Test: 300µs pulse width 1% duty cycle
2. Thermal resistance from junction to ambient PCB mounted with 0.375" (9.5mm) lead length with 2.5" x 2.5" (63.5cm x 63.5cm) copper pads

Rev. 0 2010-07-15

**SB220 ~ SB2100**
**RATINGS AND CHARACTERISTIC CURVES SB220 THRU SB2100**


Dimensions in inches (mm)



DO-15

Contact us:

**US HEADQUARTERS**

MEI SEMI INC.

**2902** Corvin Drive, Santa Clara, CA95051, USA

Tel: 1-408-733-0808 Fax: 1-408-733-2828