

## Trench MOS Barrier Schottky Rectifier - 5Amp 100Volt

### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

### Mechanical data

- Case : Molded plastic
- Epoxy : UL 94V-0 rate flame retardant
- Lead : Axial leads, solderable per MIL-STD-202,method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 1.2 grams

### Maximum ratings and Electrical characteristics

Parameters	SB5100V(H)	UNIT
Maximum Recurrent Peak Reverse Voltage	100	V
Maximum RMS Voltage	70	V
Maximum DC Blocking Voltage	100	V
Maximum Average Forward Rectified Current	5	A
Peak Forward Surge Current	100	A
Maximum Instantaneous Forward Voltage at 5A	Tc = 25°C	V
	Tc = 125°C	
Maximum Average Reverse Current at Rated DC Blocking Voltage	Tc = 25°C	mA
	Tc = 125°C	
Typical Junction Capacitance	500	pF
Typical Thermal Resistance R <sub>θJA</sub>	25	°C/W
Operating and Storage Temperature Range	-50 to +150	°C

Note : 1. H means Halogen-Free

2. Mounted on P.C.B with copper pad size 16mm x 16mm, vertical P.C.B 9.5mm lead lengths

December 2018 / Rev.7.2

# SB5100V(H)

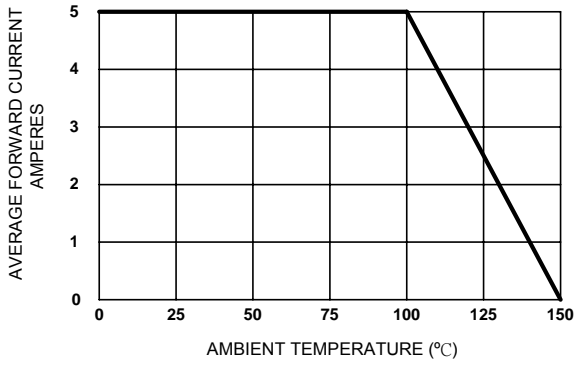


Figure 1. Forward Current Derating Curve

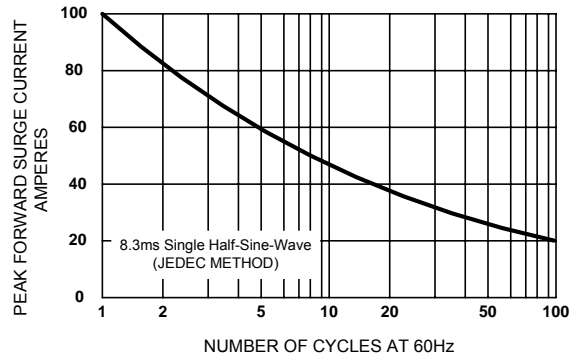


Figure 2. Maximum Non-repetitive Surge Current

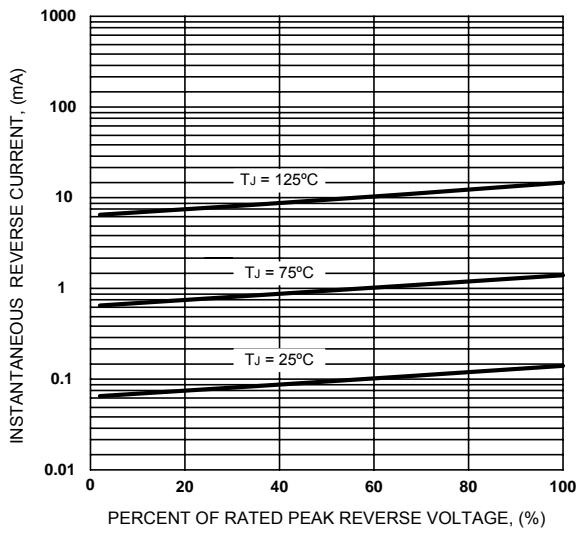


Figure 3. Typical Reverse Characteristics

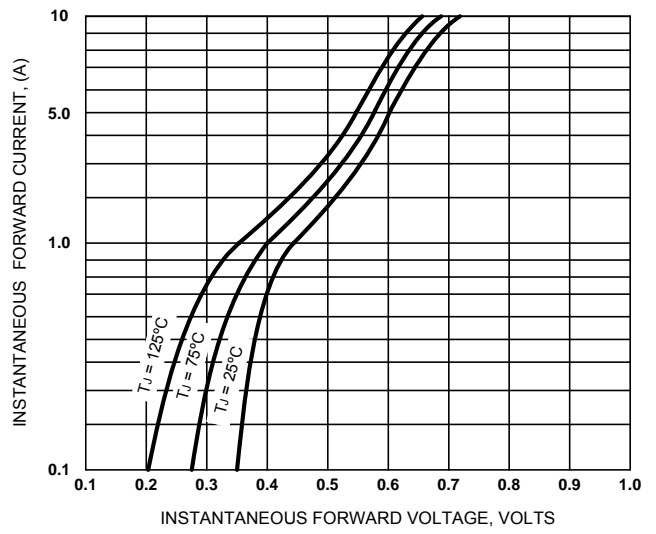


Figure 4. Typical Forward Characteristics

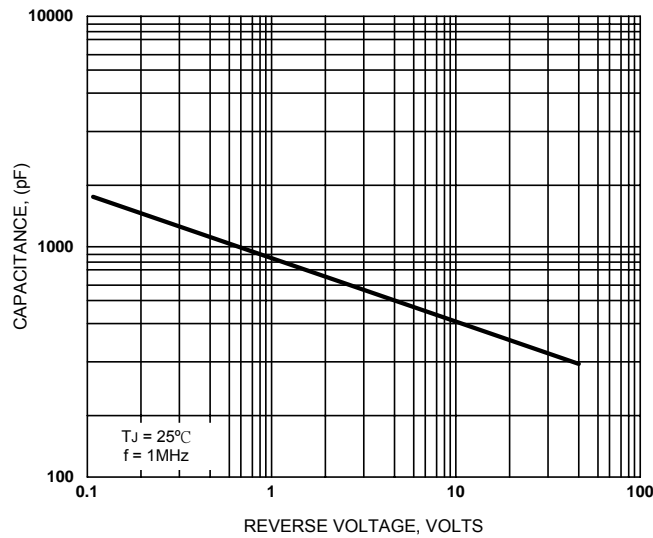
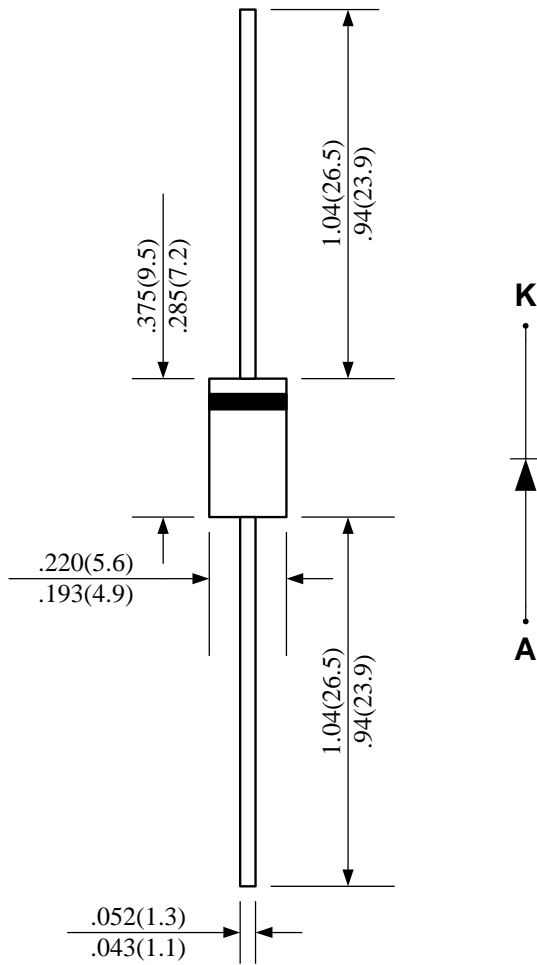


Figure 5. Typical Junction Capacitance

SB5100V(H)

D0-27 / D0-201AD



UNIT : inch(mm)

IMPORTANT NOTICE:

Sirect and Sirectsemi are registered trademarks of Sirect Semiconductor Incorporated. Sirect reserved the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase and use.

Products described herein may be covered by one or more United States, China, Taiwan or foreign patents pending.

Sirect products are not authorized for use as critical components in life support devices or system without express written approval of Sirect.

Sirect Semiconductor Incorporated does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel. Should customers purchase or use Sirect products for any unintended or unauthorized application, customers shall indemnify and hold Sirect and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.

© Sirect Semiconductor Incorporated