

Trench MOS Barrier Schottky Rectifier - 5Amp 45Volt

Features

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed
- High reliability
- High surge current capability
- Epitaxial construction
- Lead free device
- Halogen-Free

Mechanical data

- Case : Molded plastic
- Epoxy : UL 94V-0 rate flame retardant
- Terminals : Solder plated, solderable per MIL-STD-750,method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.003 ounce 0.0955 grams

Maximum ratings and Electrical characteristics

Parameters	SBR5V45	UNIT
Maximum Recurrent Peak Reverse Voltage	45	V
Maximum RMS Voltage	31	V
Maximum DC Blocking Voltage	45	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 _{θJL} (Note 1)	18	°C/W
Operating and Storage Temperature Range	-50 to +150	°C

Note : 1. Mounted on P.C.B with copper pad size 14mm x 14mm

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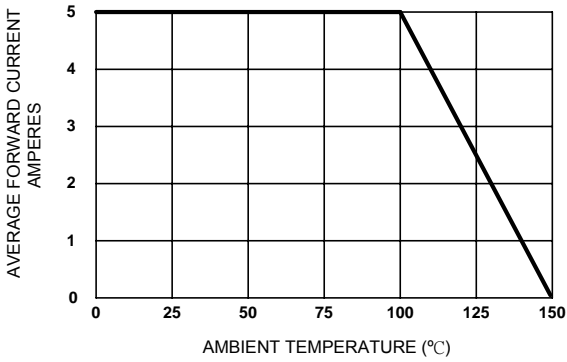


Figure 1. Forward Current Derating Curve

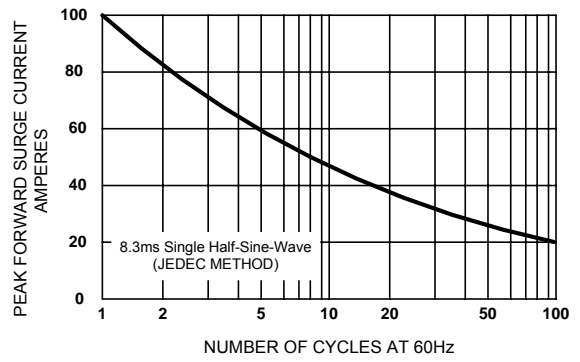


Figure 2. Maximum Non-repetitive Surge Current

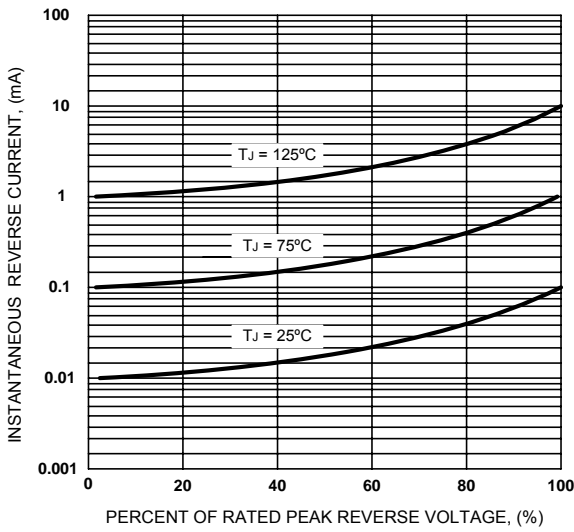


Figure 3. Typical Reverse Characteristics

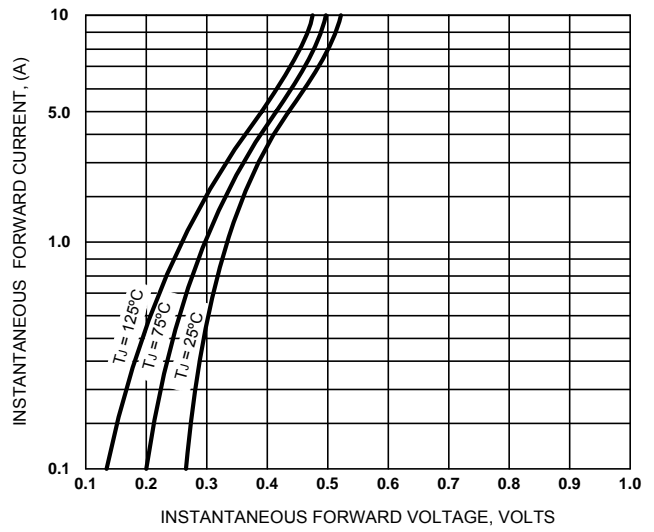


Figure 4. Typical Forward Characteristics

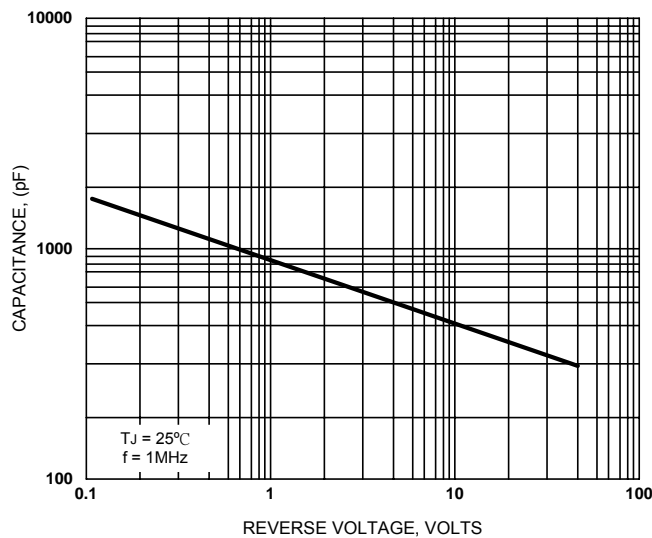
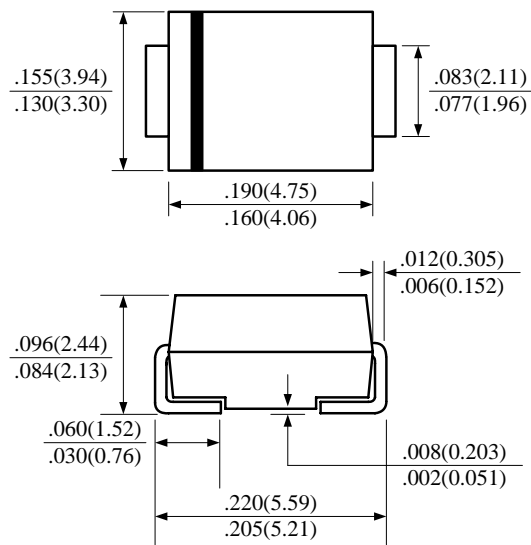


Figure 5. Typical Junction Capacitance

SBR5V45

SMB



UNIT : inch(mm)

K ← | → A