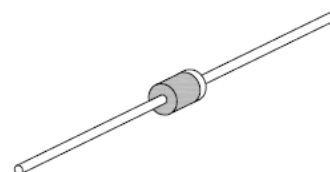


## 0.6A Schottky Barrier Rectifiers

### Features

- Guardring for overvoltage protection
- Metal to silicon junction, majority carrier conduction
- Very small conduction losses
- Extremely fast switching
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters
- Solder dip 260 ° C, 10 seconds
- RoHS Compliance



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### Mechanical Data

<b>Case:</b>	Molded plastic body
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Pure tin plated leads, solderable per J-STD-002B and JESD22-B102D
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	0.19 gram

### Maximum Ratings and Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	SB040	Unit	Conditions
<b>VRRM</b>	Maximum Repetitive Peak Reverse Voltage	40	V	
<b>VRMS</b>	Maximum RMS Voltage	28	V	
<b>VDC</b>	Maximum DC Blocking Voltage	40	V	
<b>IF(AV)</b>	Maximum Average Forward Rectified Current	0.6	A	0.375" (9.5mm) lead length at $T_L=60^{\circ}\text{C}$
<b>IFSM</b>	Peak Forward Surge Current	20	A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

# 0.6A Schottky Barrier Rectifiers

## SB040

Symbol	Description	SB040	Unit	Conditions
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage (Note 1)	0.55	V	I <sub>F</sub> =0.6A
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage (Note 1)	0.5	mA	T <sub>A</sub> =25°C
		10		T <sub>A</sub> =100°C
<b>R<sub>thJA</sub></b>	Typical Thermal Resistance	80	°C / W	Note 2
<b>R<sub>thJL</sub></b>		20		
<b>T<sub>J</sub></b>	Operating Junction Temperature Range	-65 to +125	°C	
<b>T<sub>STG</sub></b>	Storage Temperature Range	-65 to +150	°C	

**Note:** (1) Pulse test: 300µS pulse width, 1% duty cycle.

(2) Thermal resistance from junction to lead vertical P.C.B mounted, 0.375" (9.5mm) lead length.

## Typical Characteristics Curves

Fig.1-Forward Current Derating Curve

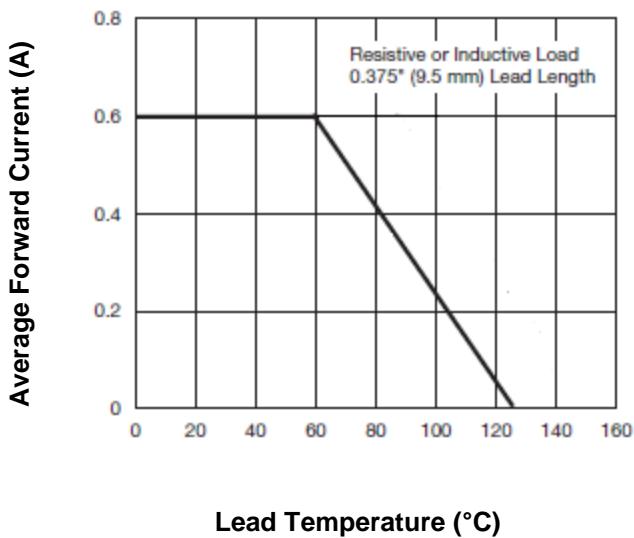


Fig.2-Max. Non-Repetitive Peak Forward Surge Current

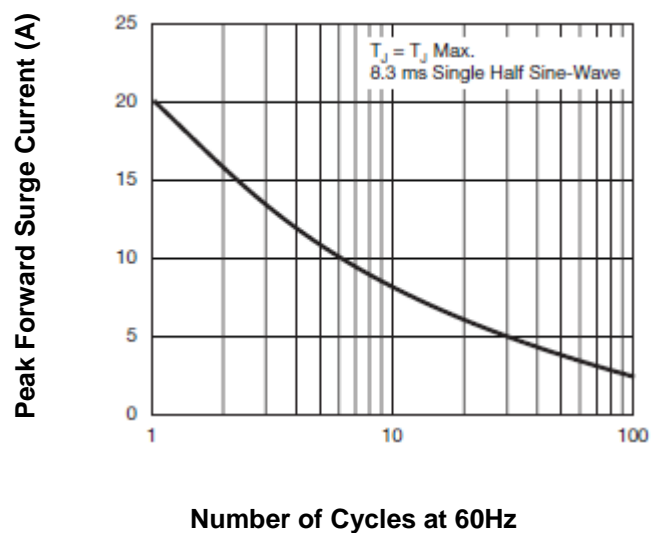


Fig.3- Typical Instantaneous Forward Characteristics

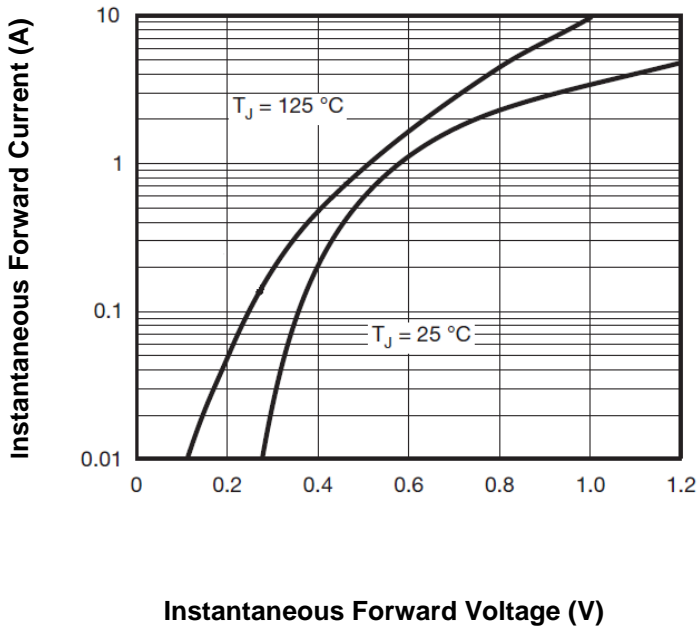


Fig.4-Typical Reverse Characteristics

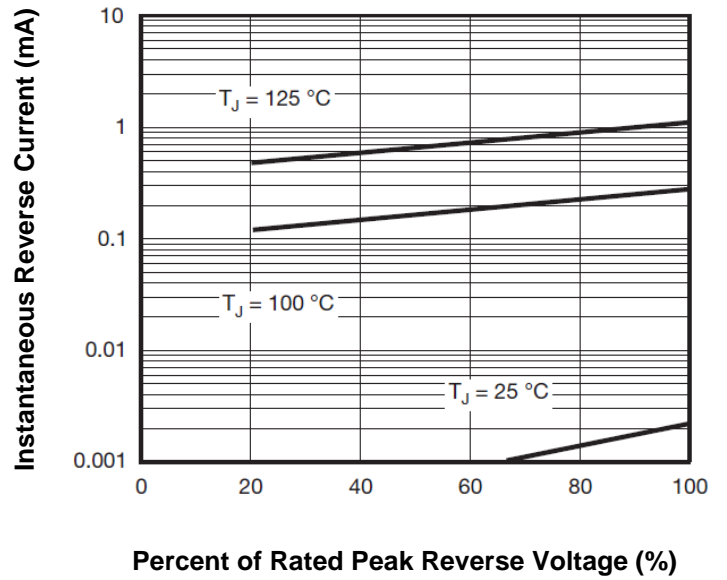


Fig.5- Typical Junction Capacitance

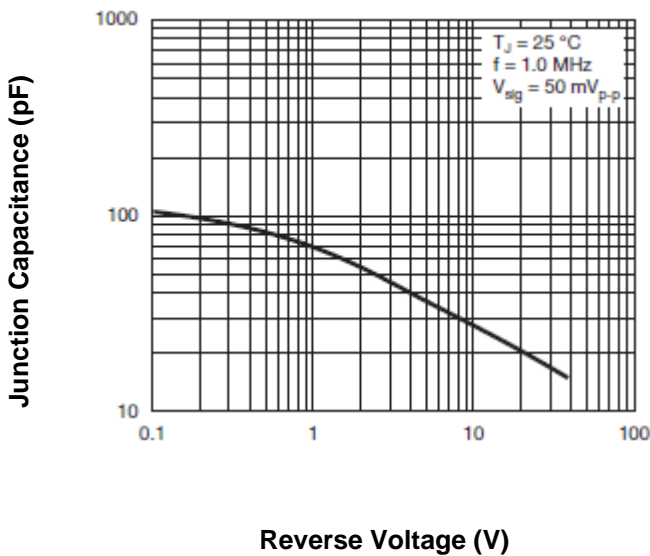
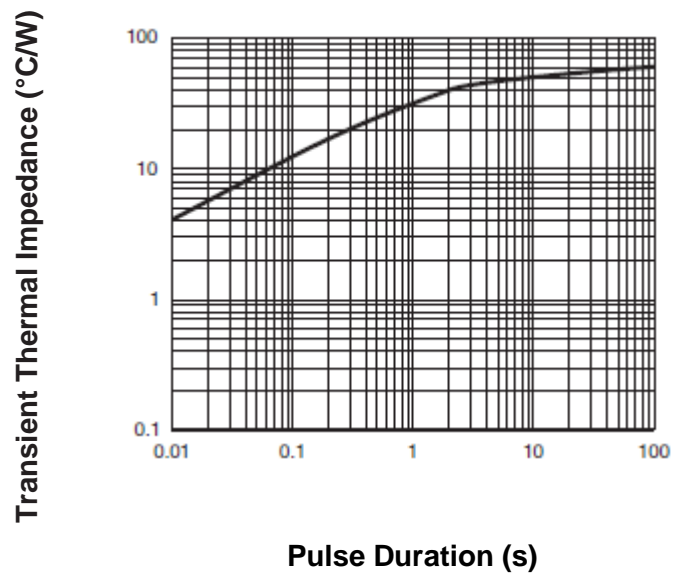
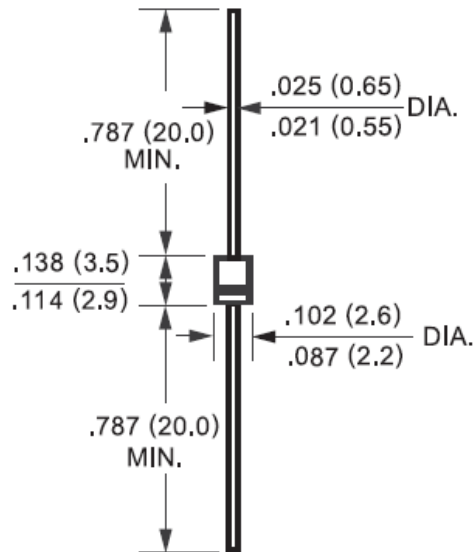


Fig.6- Transient Thermal Impedance



### Dimensions in inches (mm)



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