

# SB1620CT THRU SB1660CT

## SCHOTTKY BARRIER RECTIFIER

**VOLTAGE: 20 TO 60V**

**CURRENT: 16.0A**



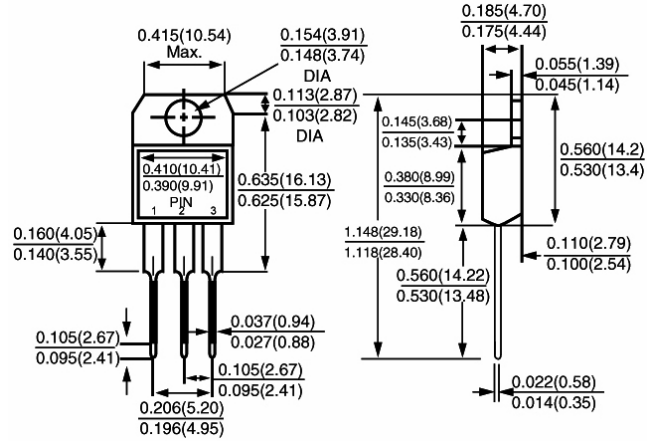
### FEATURE

High current capability, Low forward voltage drop  
 Low power loss, high efficiency  
 High surge capability  
 High temperature soldering guaranteed  
 250°C /10sec/0.375" lead length at 5 lbs tension

### MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
 Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
 Polarity: Common Cathode  
 Mounting position: any

### TO-220AB



Dimensions in inches and (millimeters)

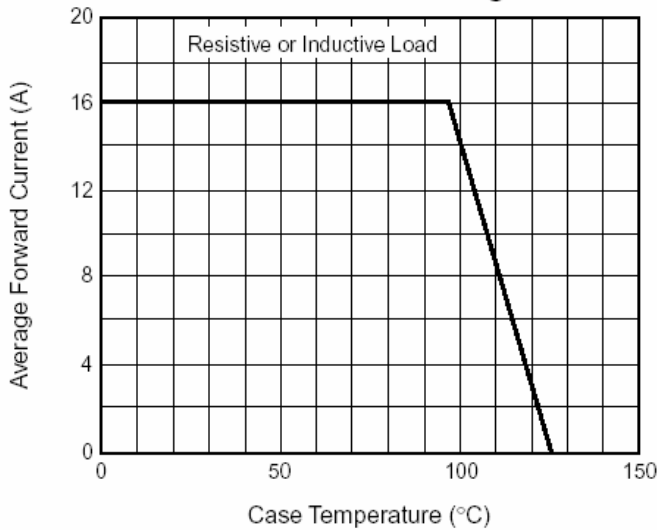
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

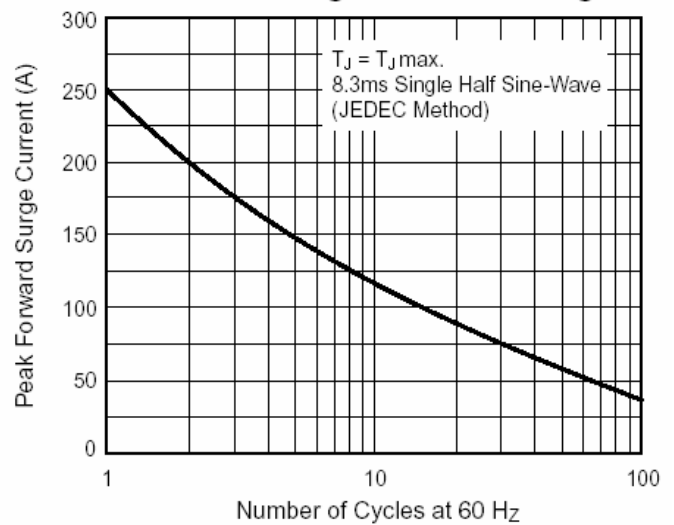
	SYMBOL	<a href="#">SB16 20CT</a>	<a href="#">SB16 30CT</a>	<a href="#">SB16 35CT</a>	<a href="#">SB16 40CT</a>	<a href="#">SB16 45CT</a>	<a href="#">SB16 50CT</a>	<a href="#">SB16 60CT</a>	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	20	30	35	40	45	50	60	V
Maximum RMS Voltage	V <sub>rms</sub>	14	21	25	28	32	35	42	V
Maximum DC blocking Voltage	V <sub>dc</sub>	20	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current	I <sub>f(av)</sub>	16							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	150							A
Maximum Forward Voltage at 8.0A	V <sub>f</sub>	0.65					0.75		V
Maximum DC Reverse Current at rated DC blocking voltage Ta = 25°C Ta = 100°C	I <sub>r</sub>	1.0							mA
		30.0					50.0		mA
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	700					500		pF
Typical Thermal Resistance (Note 2)	R(ja)	3.0							°C/W
Operating Junction Temperature	T <sub>j</sub>	-40 to +125					-50 to +150		°C
Storage Temperature Range	T <sub>stg</sub>	-65 to +150							°C

- Note:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
  2. Thermal Resistance from Junction to Case

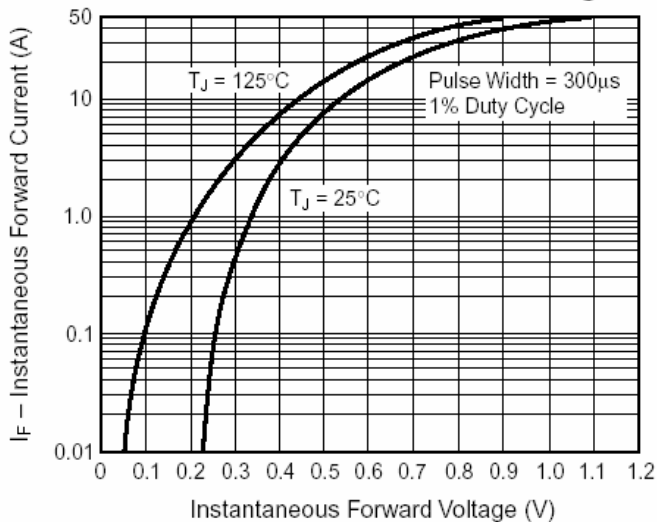
**Forward Current Derating Curve**



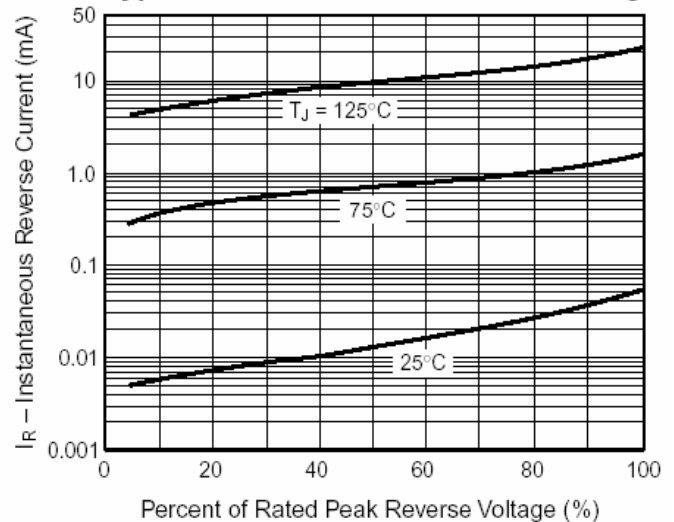
**Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



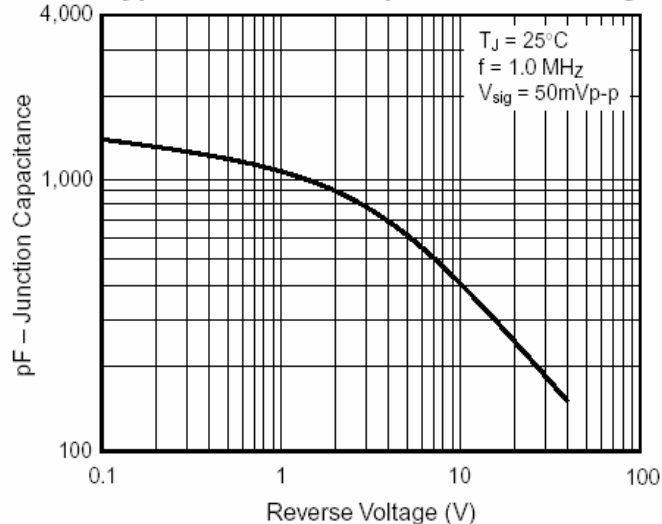
**Typical Instantaneous Forward Characteristics Per Leg**



**Typical Reverse Characteristics Per Leg**



**Typical Junction Capacitance Per Leg**



**Typical Transient Thermal Impedance Per Leg**

