

RoHS Compliant Product  
A suffix of "-C" specifies halogen free

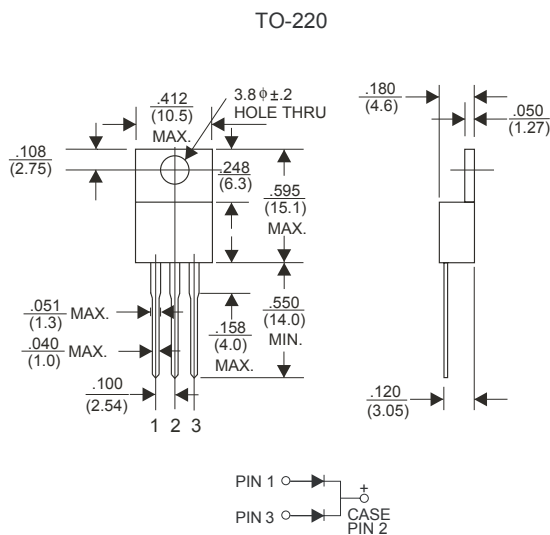


## FEATURES

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

## MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 1.93 grams (approximate)



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, de-rate current by 20%.

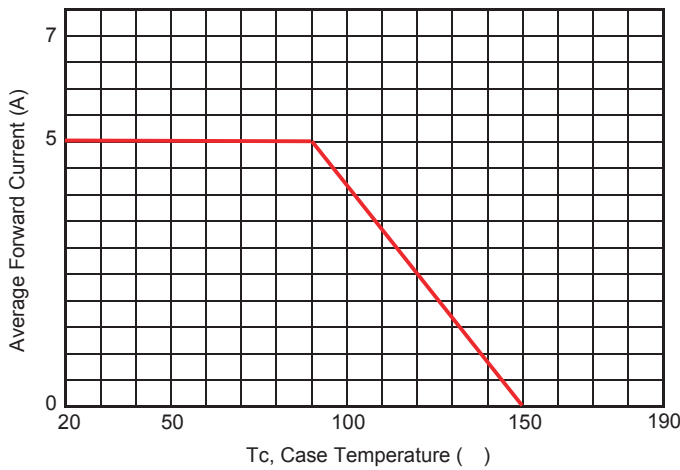
TYPE NUMBER	SYMBOL	SBR10150	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	150	V
Working Peak Reverse Voltage	$V_{RSM}$	150	V
Maximum DC Blocking Voltage	$V_{DC}$	150	V
Maximum Average Forward Rectified Current	$I_F$	5	A
Per Leg		10	
Per Device			
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	130	A
Maximum Instantaneous Forward Voltage	$V_F$	0.86	V
$I_F = 5\text{ A}, T_A = 25^\circ\text{C}$ , per leg		0.75	
$I_F = 5\text{ A}, T_A = 125^\circ\text{C}$ , per leg			
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.3	mA
$T_A = 25^\circ\text{C}$		8	
$T_A = 125^\circ\text{C}$			
Typical Junction Capacitance (Note 1)	$C_J$	350	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.5	$^\circ\text{C}/\text{W}$
Voltage Rate Of Change (Rated $V_R$ )	$dv/dt$	10000	$\text{V}/\mu\text{s}$
Operating Temperature Range $T_J$	$T_J$	-50 ~ +150	$^\circ\text{C}$
Storage Temperature Range $T_{STG}$	$T_{STG}$	-65 ~ +175	$^\circ\text{C}$

### NOTES:

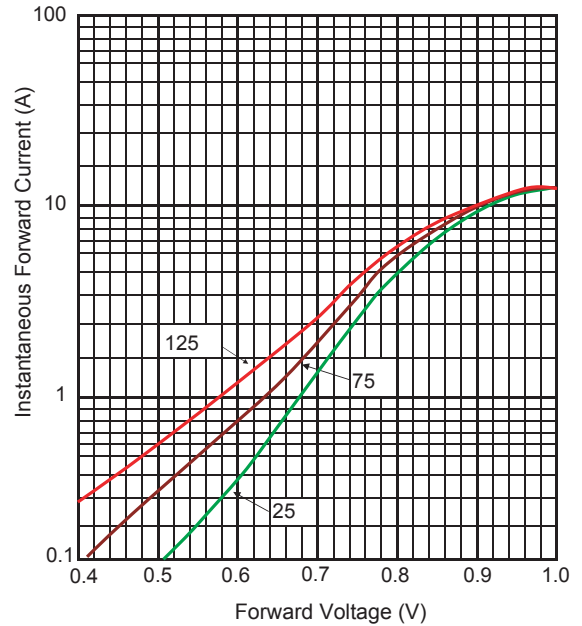
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.

**RATINGS AND CHARACTERISTIC CURVES (SBR10150)**

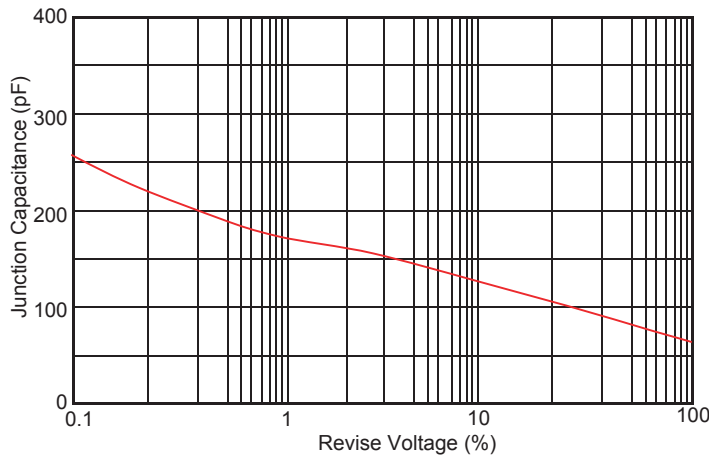
Typical Forward Current Derating Curve



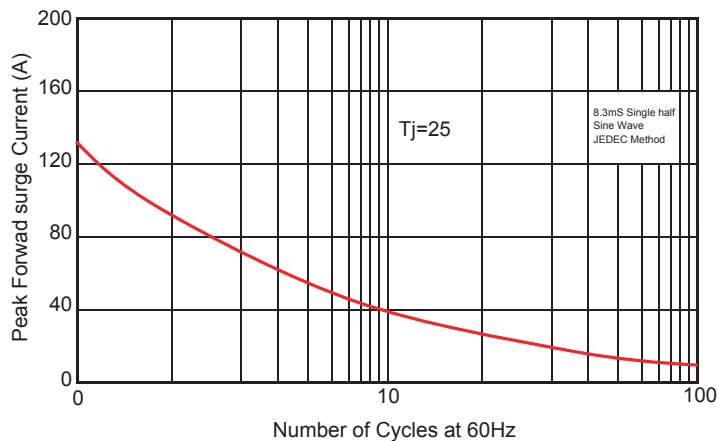
Typical Forward Characteristic



Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic

