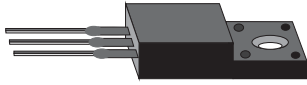


RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

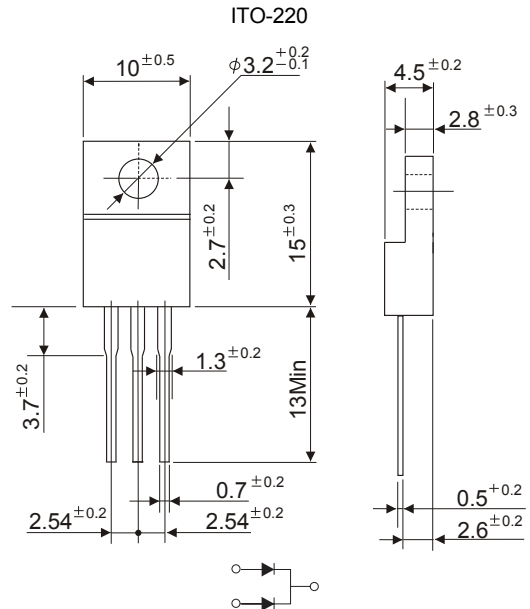


## FEATURES

- \* 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: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any
- \* Weight: 2.24 grams(Approximately)



## 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, derate current by 20%.

| TYPE NUMBER   | SYMBOL           | SBR3060RF  | UNITS              |
|---|------------------|------------|--------------------|
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$        | 60         | V                  |
| Working Peak Reverse Voltage  | $V_{RSM}$        | 60         | V                  |
| Maximum DC Blocking Voltage   | $V_{DC}$         | 60         | V                  |
| Maximum Average Forward Rectified Current (Per Leg)   | $I_F$            | 15         | A                  |
| (Per Device)  |                  | 30         |                    |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)  | $I_{FSM}$        | 180        | A                  |
| Maximum Instantaneous Forward Voltage ( $I_F = 15 \text{ Amps}, T_A = 25^\circ\text{C}$ , per leg)  | $V_F$            | 0.68       | V                  |
| Maximum Instantaneous Forward Voltage ( $I_F = 15 \text{ Amps}, T_A = 125^\circ\text{C}$ , per leg) |                  | 0.62       |                    |
| Maximum DC Reverse Current $T_a = 25^\circ\text{C}$   | $I_R$            | 0.5        | mA                 |
| at Rated DC Blocking Voltage (Note H) $T_a = 100^\circ\text{C}$                                     |                  | 12         |                    |
| Typical Junction Capacitance (Note 1)   | $C_J$            | 1700       | pF                 |
| Typical Thermal Resistance $\theta_{j-c}$ (Note 2)  | $R_{\theta j-c}$ | 4.0        | $^\circ\text{C/W}$ |
| Voltage Rate Of Change (Rated $V_R$ )   | $dv/dt$          | 10000      | V/us               |
| Operating Temperature Range   | $T_J$            | -50 ~ +150 | $^\circ\text{C}$   |
| Storage Temperature Range   | $T_{STG}$        | -65 ~ +175 | $^\circ\text{C}$   |

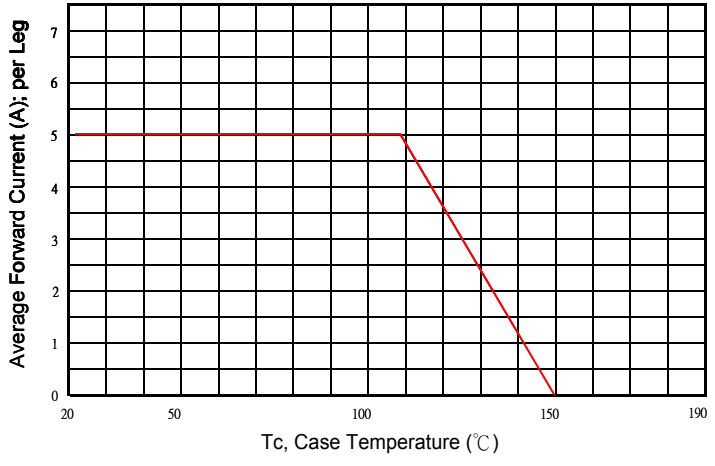
NOTES:

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

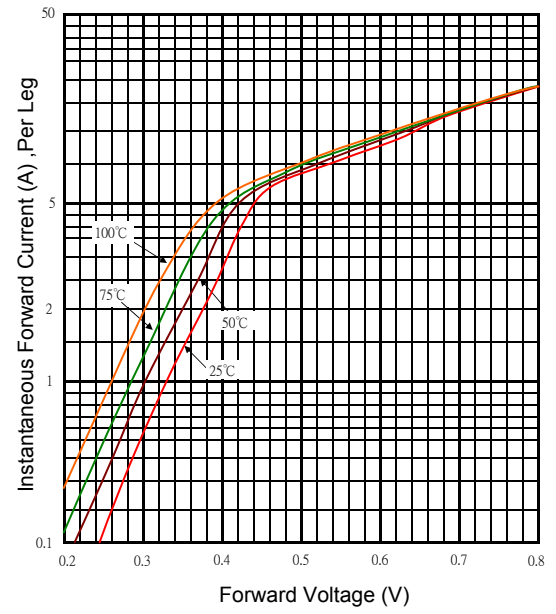
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RATING AND CHARACTERISTIC CURVES

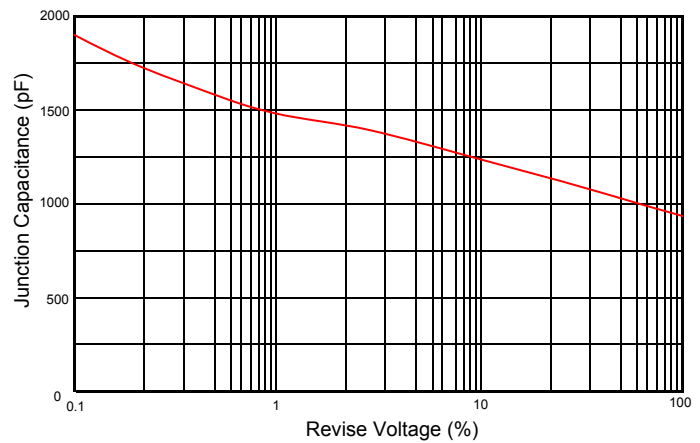
Typical Forward Current Derating Curve



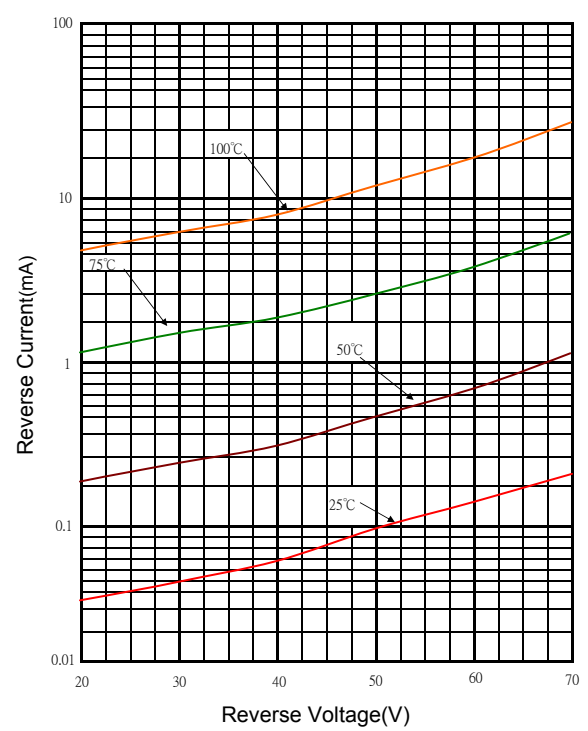
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

