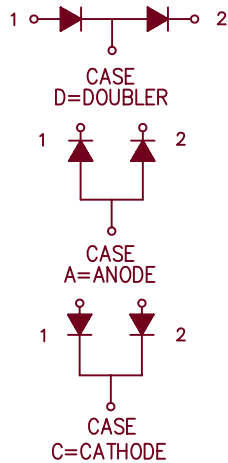
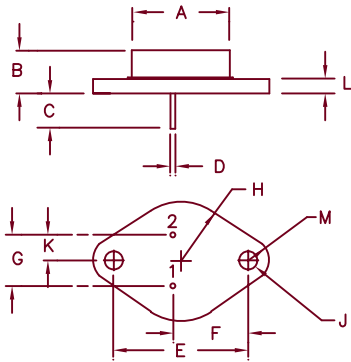


Schottky Rectifier SBT3060



| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| A | — | .875 | — | 22.23 | Dia. |
| B | .250 | .450 | 6.35 | 11.43 | |
| C | .435 | — | 11.05 | — | |
| D | .038 | .043 | .97 | 1.09 | Dia. |
| E | 1.177 | 1.197 | 29.90 | 30.40 | |
| F | .655 | .675 | 16.64 | 17.15 | |
| G | .420 | .440 | 10.67 | 11.18 | |
| H | — | .525 | — | 13.34 | Rad. |
| J | .151 | .161 | 3.84 | 4.09 | Dia. |
| K | .205 | .225 | 5.21 | 5.72 | |
| L | — | .135 | — | 3.43 | |
| M | — | .188 | — | 4.78 | Rad. |

TO-204AA (TO-3)

| Microsemi Catalog Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage |
|--------------------------|------------------------------|---------------------------------|
| SBT3060* | 60V | 60V |

*ADD D, C, or A

- Schottky Barrier Rectifier
- Guard Ring Protection
- V_{RRM} 60V
- 30 Amperes/package
- Reverse Energy Tested

Electrical Characteristics Per Leg

| | | |
|--------------------------------------|---------------------|--|
| Average forward current (standard) | $I_{F(AV)}$ 15 Amps | $T_C = 159^\circ\text{C}$, Square wave, $R_{\theta JC} = 1.4^\circ\text{C/W}$ |
| Average forward current (reverse) | $I_{F(AV)}$ 15 Amps | $T_C = 150^\circ\text{C}$, Square wave, $R_{\theta JC} = 2.2^\circ\text{C/W}$ |
| Maximum surge current | I_{FSM} 600 Amps | 8.3 ms, half sine $T_J = 175^\circ\text{C}$ |
| Max repetitive peak reverse current | $I_{R(OV)}$ 2 Amps | $f = 1\text{ KHz}$, 25°C , 1 μsec Square wave |
| Typical forward voltage | V_{FM} 0.60 Volts | $I_{FM} = 30\text{A}$: $T_J = 175^\circ\text{C}^*$ |
| Max peak forward voltage | V_{FM} 0.74 Volts | $I_{FM} = 30\text{A}$: $T_J = 25^\circ\text{C}^*$ |
| Max peak reverse current | I_{RM} 25 mA | V_{RRM} , $T_J = 125^\circ\text{C}^*$ |
| Max peak reverse current | I_{RM} 1.5 mA | V_{RRM} , $T_J = 25^\circ\text{C}$ |
| Typical junction capacitance per leg | C_J 1200 pF | $V_R = 5.0\text{V}$, $T_J = 25^\circ\text{C}$ |

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

Thermal and Mechanical Characteristics

| | | |
|--|-----------------|--|
| Storage temp range | T_{STG} | -65°C to 175°C |
| Operating junction temp range | T_J | -65°C to 175°C |
| Maximum thermal resistance (standard polarity) | $R_{\theta JC}$ | 1.4°C/W Junction to case |
| Maximum thermal resistance (reverse polarity) | $R_{\theta JC}$ | 2.2°C/W Case to sink |
| Typical thermal resistance (greased) | $R_{\theta CS}$ | 0.5°C/W Junction to case |
| Weight | | 1.0 ounces (28 grams) typical |



6 Lake Street
Lawrence, MA 01841
PH: (978) 620-2600
FAX: (978) 689-0803
www.microsemi.com

05-30-07 Rev. 2

SBT3060

Figure 1
Typical Forward Characteristics—Per Leg

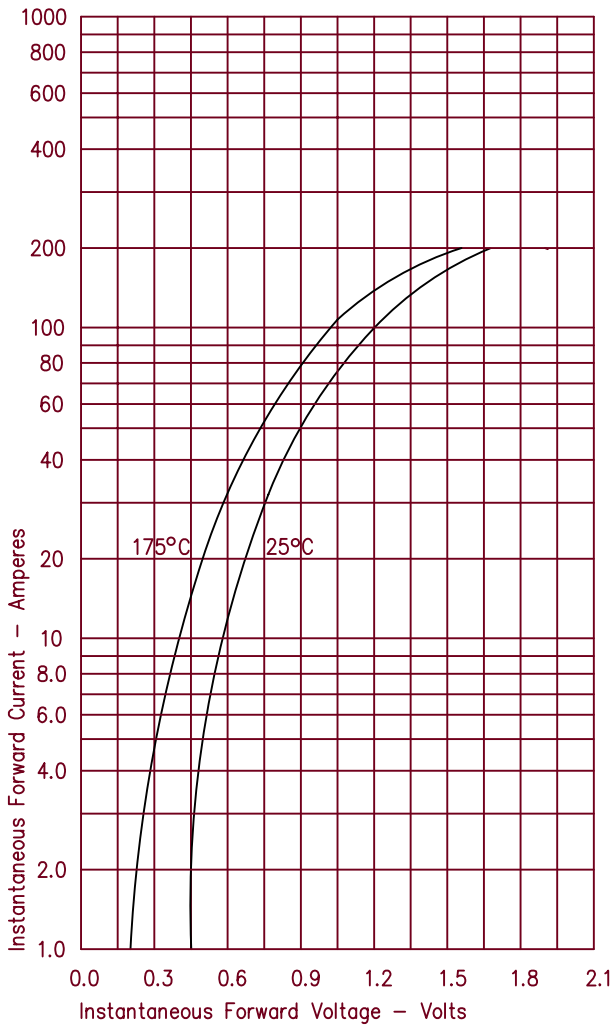


Figure 3
Typical Junction Capacitance—Per Leg

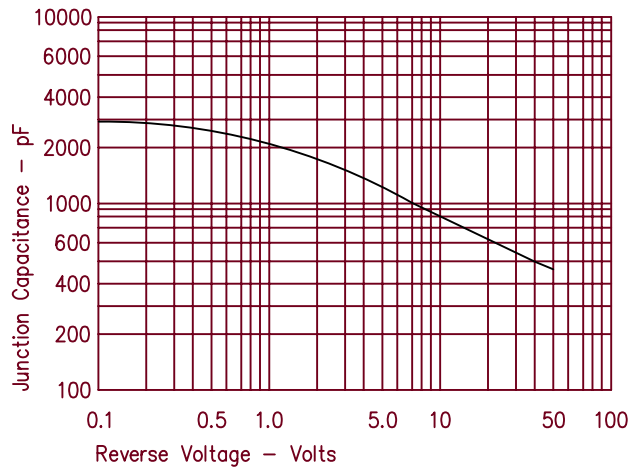


Figure 4
Forward Current Derating—Per Leg (Standard Polarity)

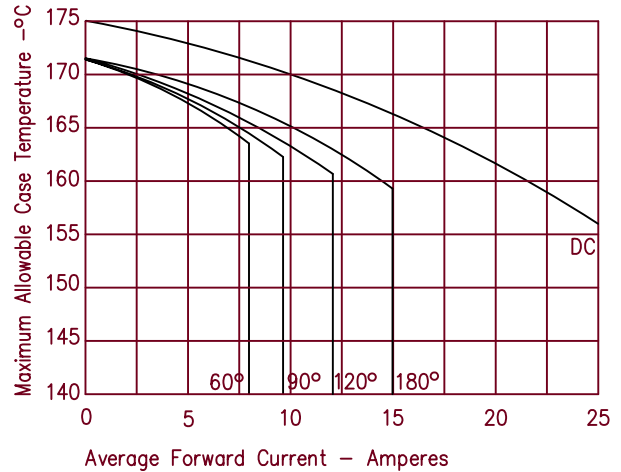


Figure 2
Typical Reverse Characteristics—Per Leg

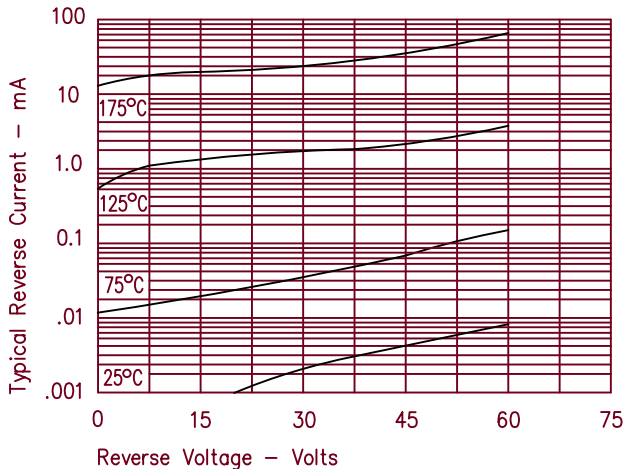
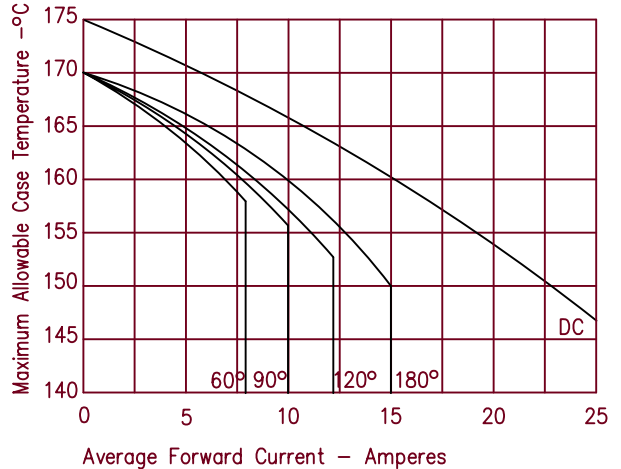


Figure 5
Forward Current Derating—Per Leg (Reverse Polarity)



SBT3060

Figure 6
Maximum Forward Power Dissipation—Per Leg

