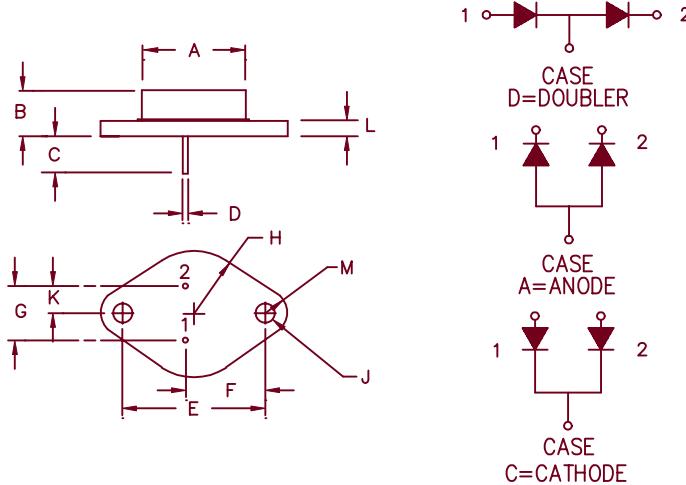


# Schottky Rectifier SBT3060



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
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 Reverse Voltage	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
Average forward current (reverse)	$ I_F(AV)$ 15 Amps
Maximum surge current	$ I_{FSM}$ 600 Amps
Max repetitive peak reverse current	$ I_{R(0V)}$ 2 Amps
Typical forward voltage	$V_{FM}$ 0.60 Volts
Max peak forward voltage	$V_{FM}$ 0.74 Volts
Max peak reverse current	$ I_{RM}$ 25 mA
Max peak reverse current	$ I_{RM}$ 1.5 mA
Typical junction capacitance per leg	$C_J$ 1200 pF

$T_C = 159^\circ\text{C}$ , Square wave, $R_{\theta JC} = 1.4^\circ\text{C}/\text{W}$
$T_C = 150^\circ\text{C}$ , Square wave, $R_{\theta JC} = 2.2^\circ\text{C}/\text{W}$
8.3 ms, half sine $T_J = 175^\circ\text{C}$
$f = 1 \text{ KHz}, 25^\circ\text{C}, 1 \mu\text{sec}$ Square wave
$ I_{FM} = 30A: T_J = 175^\circ\text{C}^*$
$ I_{FM} = 30A: T_J = 25^\circ\text{C}^*$
$V_{RRM}, T_J = 125^\circ\text{C}^*$
$V_{RRM}, T_J = 25^\circ\text{C}$
$V_R = 5.0V, T_J = 25^\circ\text{C}$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , 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

# SBT3060

Figure 1  
Typical Forward Characteristics—Per Leg

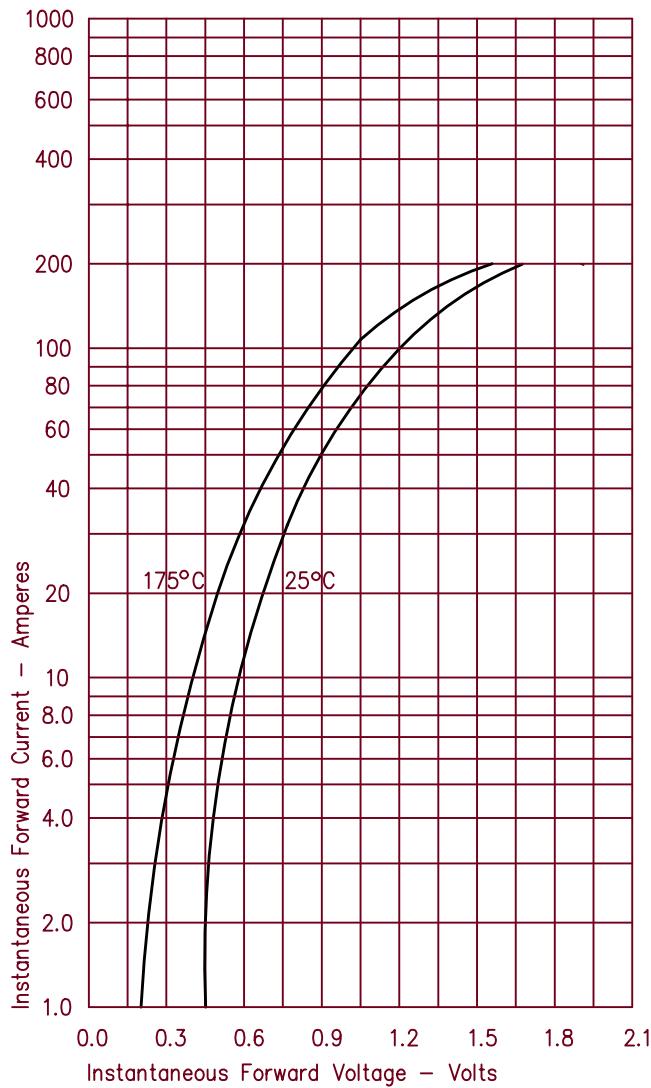


Figure 2  
Typical Reverse Characteristics—Per Leg

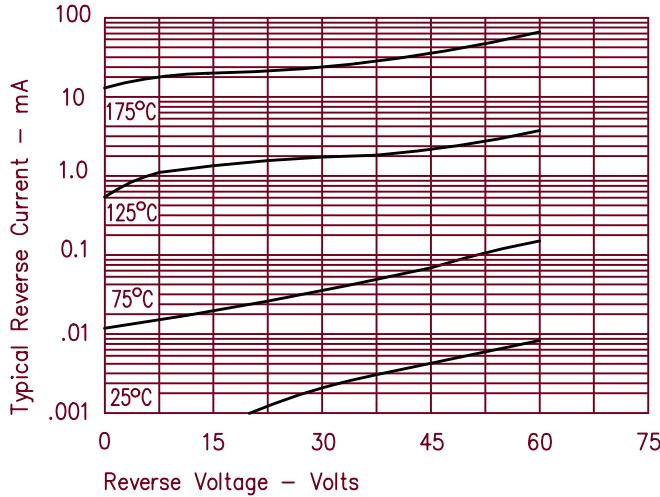


Figure 3  
Typical Junction Capacitance—Per Leg

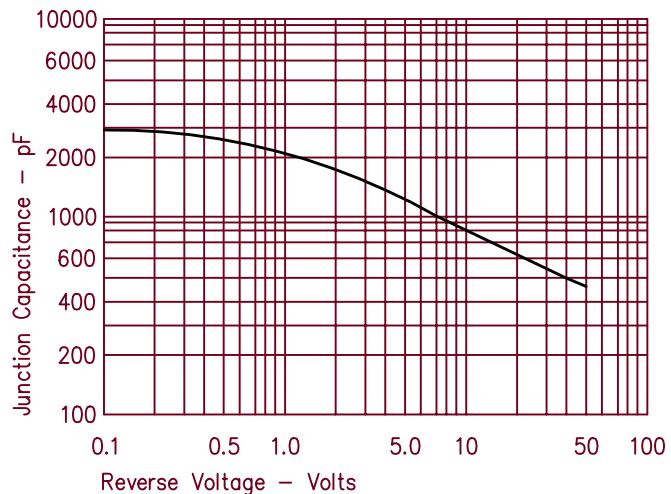


Figure 4  
Forward Current Derating—Per Leg (Standard Polarity)

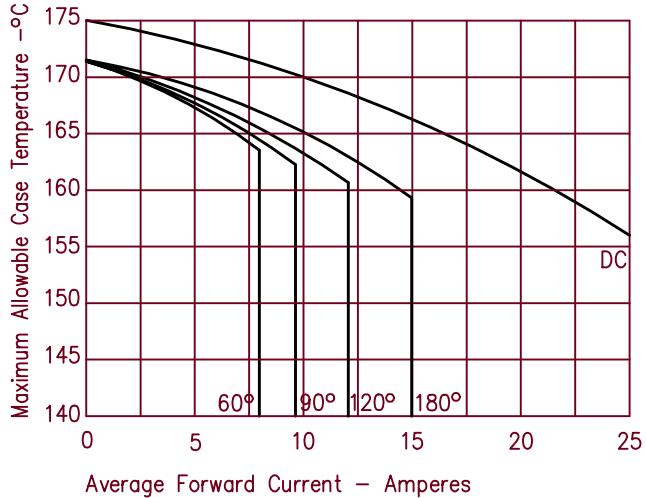
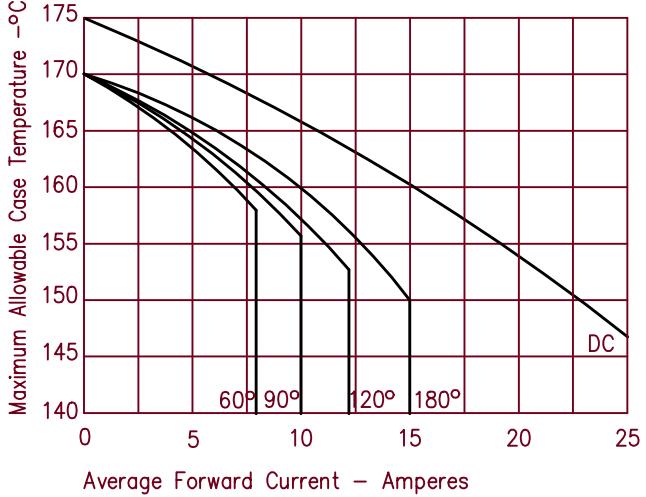


Figure 5  
Forward Current Derating—Per Leg (Reverse Polarity)



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Figure 6  
Maximum Forward Power Dissipation—Per Leg

