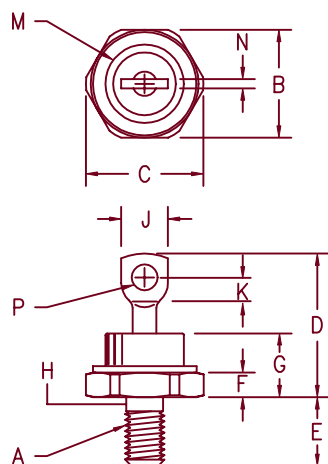


80 Amp Schottky Rectifier SBR8060



- Notes:
1. Full threads within 2 1/2 threads
 2. Standard Polarity: Stud is Cathode
Reverse Polarity: Stud is Anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1/4-28
B	.669	.688	17.00	17.47	
C	---	.794	---	20.16	
D	.750	1.00	19.05	25.40	
E	.422	.453	10.72	11.50	1
F	.115	.200	2.93	5.08	
G	---	.450	---	11.43	
H	.220	.249	5.59	6.32	
J	---	.375	---	9.52	Dia
K	.156	---	3.97	---	
M	---	.510	---	12.95	
N	---	.080	---	2.03	
P	.140	.175	3.56	4.44	Dia

DO-203AB (DO-5)

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
SBR8060*	MBR7560 MBR8060	60V	60V

*Add the Suffix R for Reverse Polarity

- Schottky barrier rectifier
- Guard ring protection
- VRRM 60 Volts
- Reverse Energy Tested
- 175°C junction temperature
- 80 Amperes

Electrical Characteristics

Average forward current
Maximum surge current
Max repetitive peak reverse current
Max peak forward voltage
Max peak reverse current
Max peak reverse current
Typical junction capacitance

$I_F(AV)$ 80 Amps
 I_{FSM} 1200 Amps
 $I_R(0V)$ 2 Amp
 V_{FM} .77 Volts
 I_{RM} 30 mA
 I_{RM} 2.0 mA
 C_J 2000 pF

$T_C = 131^\circ C$, square wave, $R_{\theta JC} = 0.8^\circ C/W$
8.3ms, half sine, $T_J = 175^\circ C$
 $f = 1$ KHz, $25^\circ C$, 1 μsec square wave
 $I_{FM} = 80A$: $25^\circ C^*$
 $V_{RRM}, T_J = 125^\circ C$
 $V_{RRM}, T_J = 25^\circ C$
 $V_R = 5.0V$, $T_J = 25^\circ C$, $f = 1MHz$

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

Thermal and Mechanical Characteristics

Storage temp range
Operating junction temp range
Maximum thermal resistance
Typical thermal resistance (greased)
Mounting torque
Weight

T_{STG}
 T_J
 $R_{\theta JC}$
 $R_{\theta CS}$

$-55^\circ C$ to $175^\circ C$
 $-55^\circ C$ to $175^\circ C$
 $0.8^\circ C/W$ junction to case
 $0.5^\circ C/W$ case to sink
25-30 inch pounds
.54 ounces (15.3 grams) typical

SBR8060

Figure 1
Typical Forward Characteristics

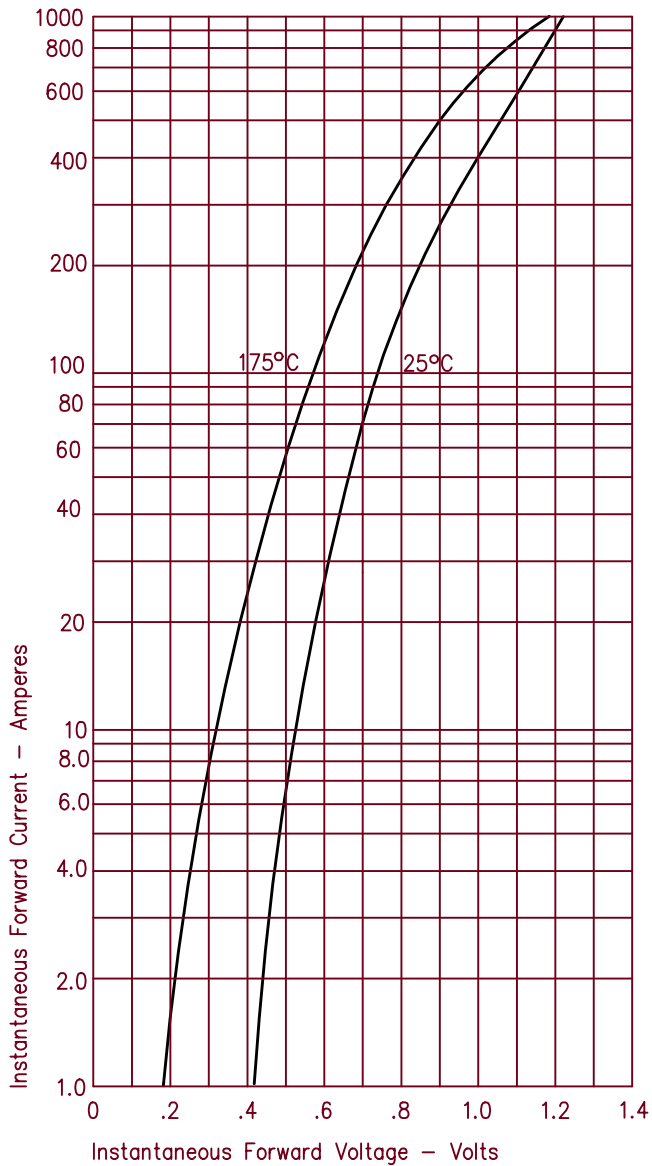


Figure 2
Typical Reverse Characteristics

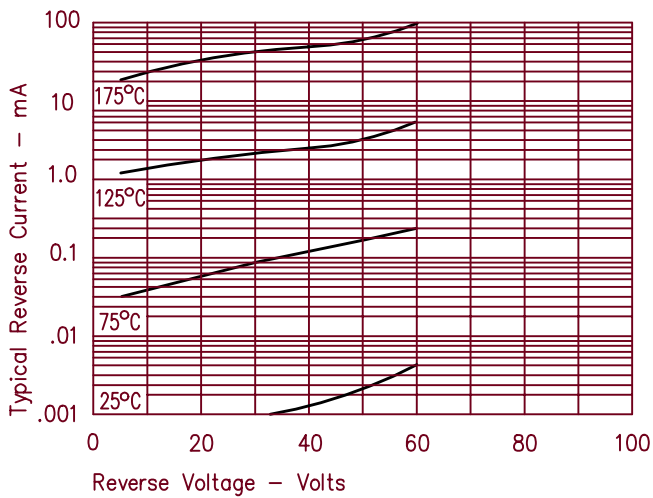


Figure 3
Typical Junction Capacitance

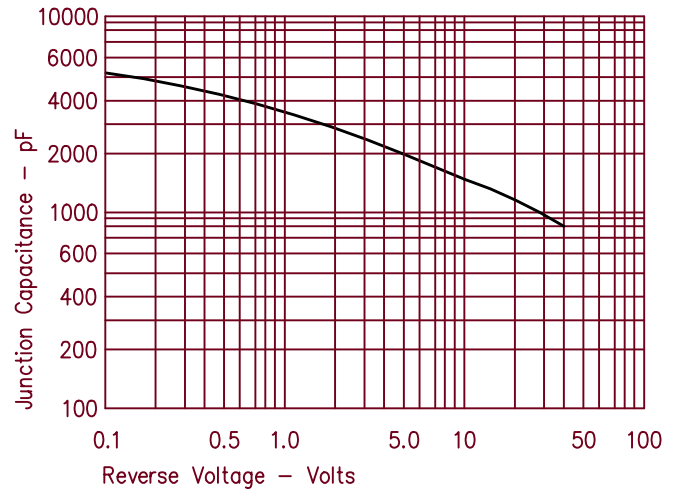


Figure 4
Forward Current Derating

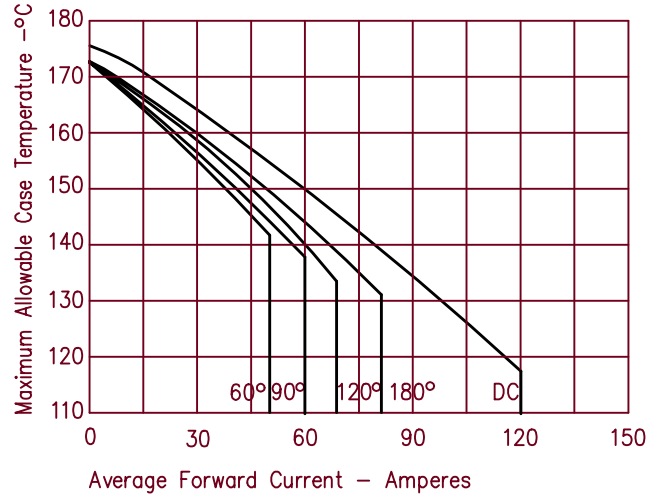


Figure 5
Maximum Forward Power Dissipation

