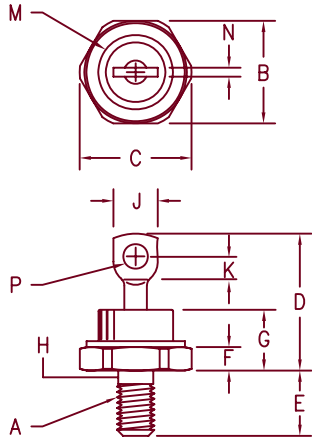


# 80 Amp Schottky Rectifier SBR8060



**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	
F	.115	.200	2.93	5.08	
G	----	.450	----	11.43	
H	.220	.249	5.59	6.32	1
J	----	.375	----	9.52	
K	.156	----	3.97	----	
M	----	.510	----	12.95	Dia
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	<ul style="list-style-type: none"> <li>• Schottky barrier rectifier</li> <li>• Guard ring protection</li> <li>• VRRM 60 Volts</li> <li>• Reverse Energy Tested</li> <li>• 175°C junction temperature</li> <li>• 80 Amperes</li> </ul>
*Add the Suffix R for Reverse Polarity				

Electrical Characteristics		
Average forward current	I <sub>F(AV)</sub> 80 Amps	T <sub>C</sub> = 131°C, square wave, R <sub>θJC</sub> = 0.8°C/W
Maximum surge current	I <sub>FSM</sub> 1200 Amps	8.3ms, half sine, T <sub>J</sub> = 175°C
Max repetitive peak reverse current	I <sub>R(OV)</sub> 2 Amp	f = 1 KHz, 25°C, 1 μsec square wave
Max peak forward voltage	V <sub>FM</sub> .77 Volts	I <sub>FM</sub> = 80A: 25°C*
Max peak reverse current	I <sub>RM</sub> 30 mA	VRRM, T <sub>J</sub> = 125°C
Max peak reverse current	I <sub>RM</sub> 2.0 mA	VRRM, T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 2000 pF	VR = 5.0V, T <sub>J</sub> = 25°C, f = 1MHz
*Pulse test: Pulse width 300 μsec, Duty cycle 2%		

Thermal and Mechanical Characteristics		
Storage temp range	T <sub>STG</sub>	-55°C to 175°C
Operating junction temp range	T <sub>J</sub>	-55°C to 175°C
Maximum thermal resistance	R <sub>θJC</sub>	0.8°C/W junction to case
Typical thermal resistance (greased)	R <sub>θCS</sub>	0.5°C/W case to sink
Mounting torque		25-30 inch pounds
Weight		.54 ounces (15.3 grams) typical



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05-30-07 Rev. 3

# SBR8060

Figure 1  
Typical Forward Characteristics

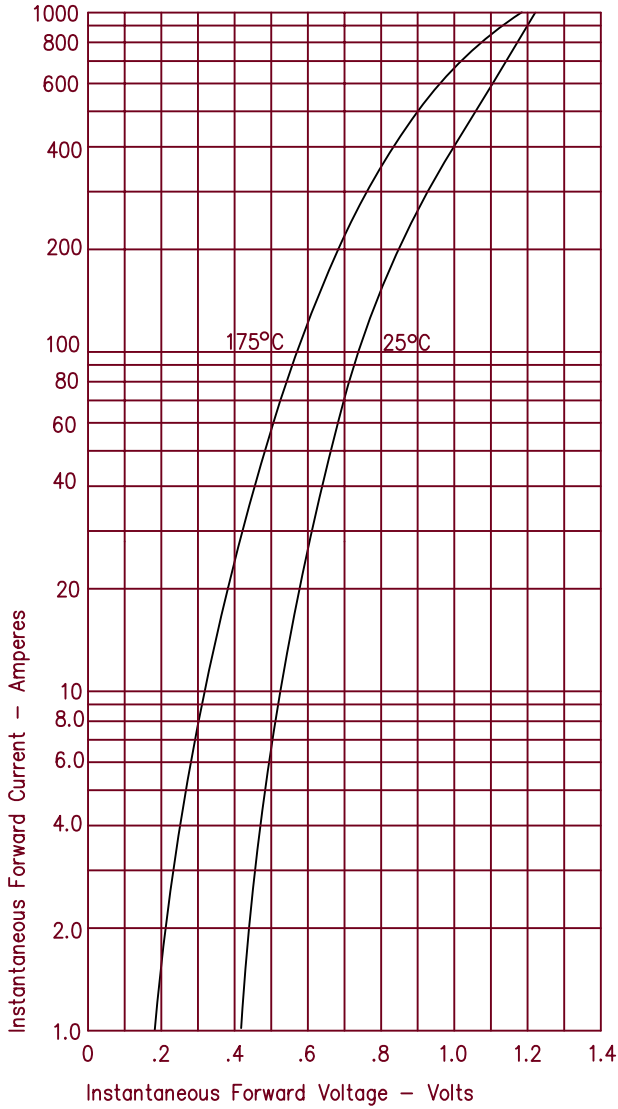


Figure 3  
Typical Junction Capacitance

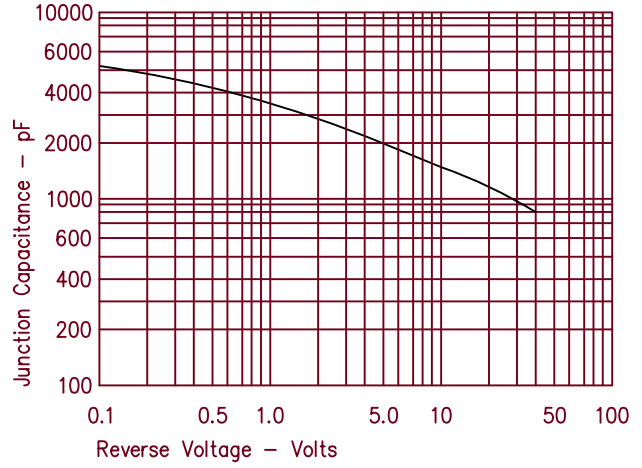


Figure 4  
Forward Current Derating

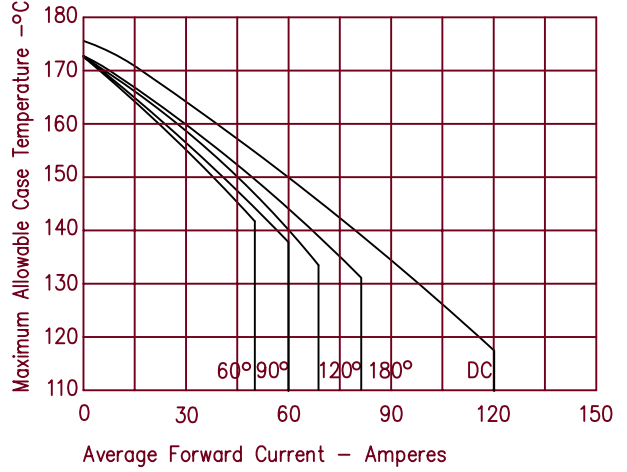


Figure 2  
Typical Reverse Characteristics

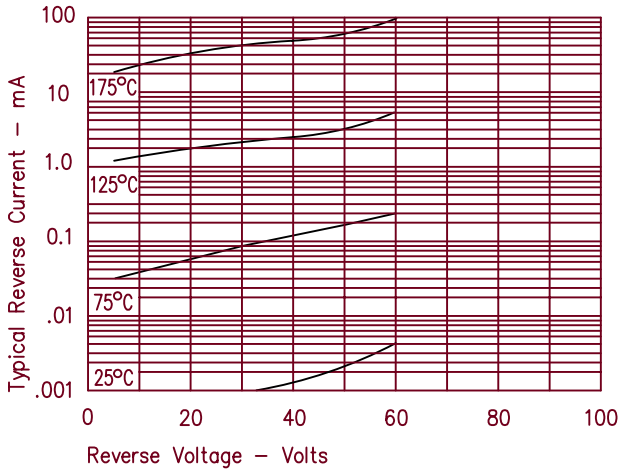


Figure 5  
Maximum Forward Power Dissipation

