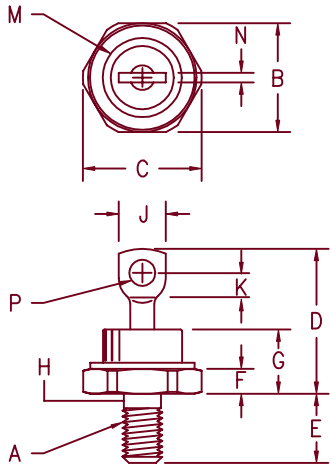


60 Amp Schottky Rectifier SBR6035 — SBR6045



- 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

SBR6035*
SBR6040*
SBR6045*

Peak Reverse
Voltage

35V
40V
45V

*Add Suffix R For Reverse Polarity

- Schottky Barrier Rectifier
- Low forward voltage
- Guard Ring Protected
- Reverse Energy Tested
- 150°C Junction Temperature
- V_{RRM} -35 to 45 Volts

Electrical Characteristics

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

$I_F(AV)$ 60 Amps
 I_{FSM} 1000 Amps
 $I_R(OV)$ 2 Amp
 V_{FM} .58 Volts
 V_{FM} .60 Volts
 I_{RM} 600 mA
 I_{RM} 2.0 mA
 C_J 2700 pF

$T_C = 102^\circ\text{C}$, Square wave, $R_{\theta JC} = 1.0^\circ\text{C/W}$
8.3ms, half sine, $T_J = 125^\circ\text{C}$
 $f = 1 \text{ KHz}$, 25°C , 1 μsec Square wave
 $I_{FM} = 60\text{A}$: 125°C *
 $I_{FM} = 60\text{A}$: 25°C *
 $V_{RRM}, T_J = 125^\circ\text{C}$ *
 $V_{RRM}, T_J = 25^\circ\text{C}$
 $V_R = 5.0\text{V}$, $T_J = 25^\circ\text{C}$

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

Thermal and Mechanical Characteristics

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

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

-65°C to 175°C
 -65°C to 150°C
 1.0°C/W Junction to Case
 0.5°C/W Case to sink
25-30 inch pounds
.54 ounces (15.3 grams) typical

SBR6035

— SBR6045

Figure 1
Typical Forward Characteristics

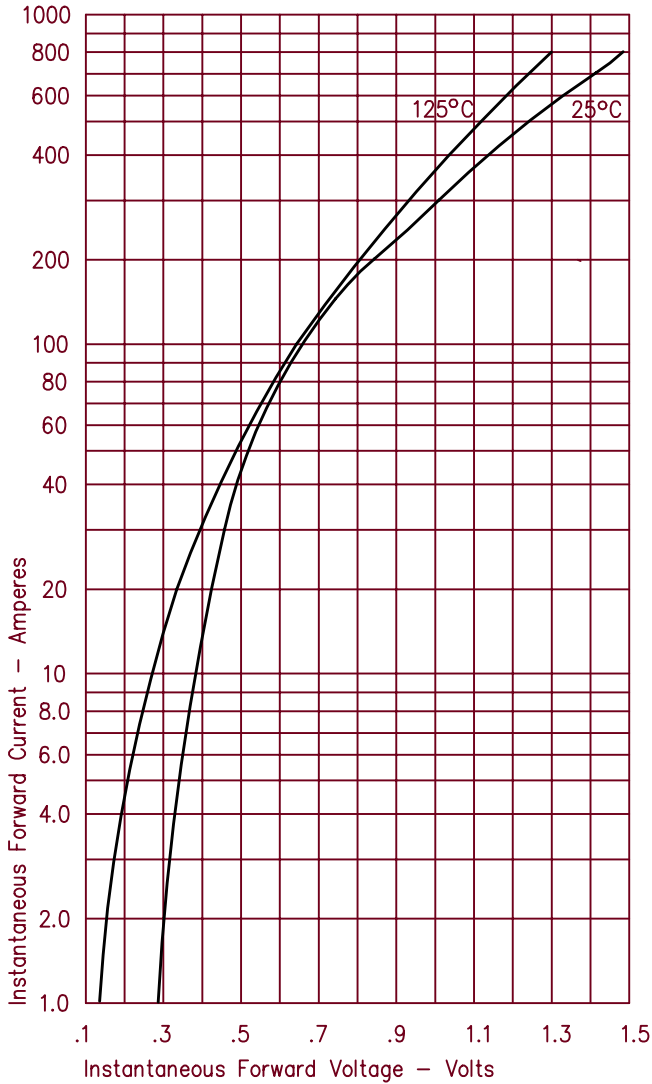


Figure 3
Typical Junction Capacitance

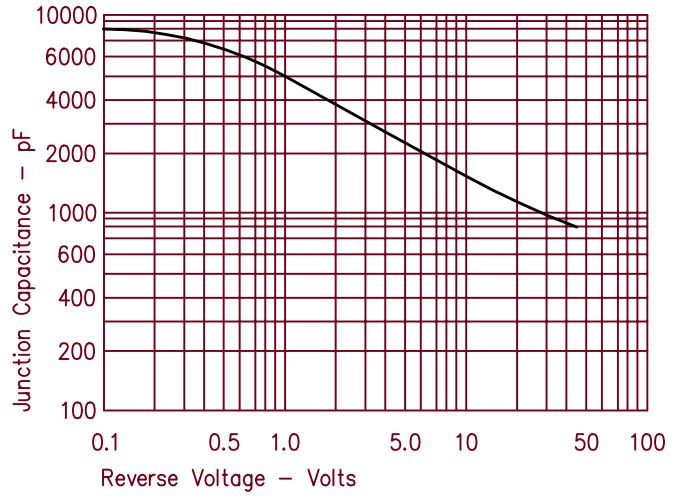


Figure 4
Forward Current Derating

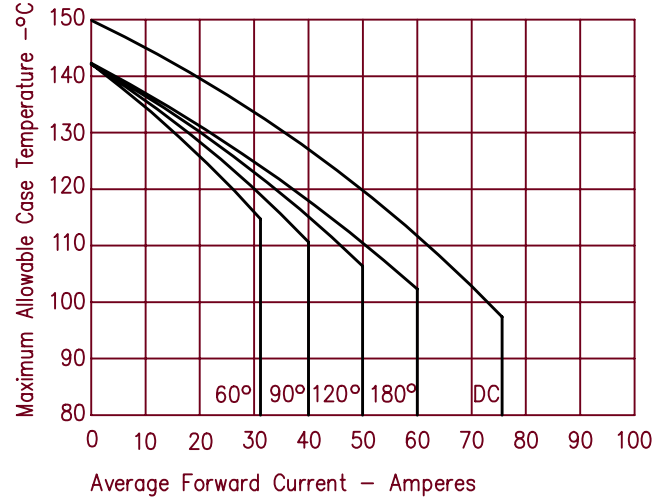


Figure 2
Typical Reverse Characteristics

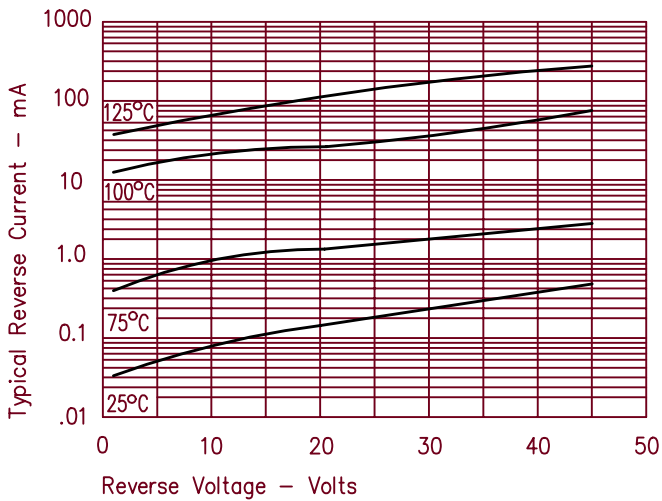


Figure 5
Maximum Forward Power Dissipation

