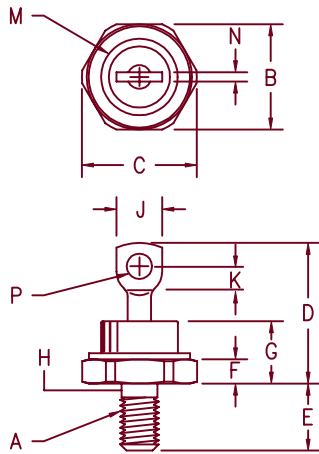


60 Amp Schottky Rectifier SBR60150



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

SBR60150*

Working Peak
Reverse Voltage

150V

Peak Reverse
Voltage

150V

*Add Suffix R For Reverse Polarity

- Schottky barrier rectifier
- Hermetic packaging
- Guard ring protected
- Reverse Energy Tested
- 175°C junction temperature
- V_{RRM} - 150 Volts

Electrical Characteristics

Average forward current

$I_F(AV)$ 60 Amps

$T_C = 125^\circ C$, square wave, $R_{\theta JC} = 1.0$ @/W
8.3ms, half sine, $T_J = 175^\circ C$

Maximum surge current

I_{FSM} 1000 Amps

Max repetitive peak reverse current

$I_R(0V)$ 2 Amp

$f = 1$ KHz, $25^\circ C$, 1 μ sec square wave

Max peak forward voltage

V_{FM} .90 Volts

$I_{FM} = 60A$: $25^\circ C$ *

Max peak forward voltage

V_{FM} .75 Volts

$I_{FM} = 60A$: $125^\circ C$ *

Max peak reverse current

I_{RM} 10 mA

V_{RRM} , $T_J = 125^\circ C$ *

Max peak reverse current

I_{RM} 2 mA

V_{RRM} , $T_J = 25^\circ C$

Typical junction capacitance

C_J 970 pF

$V_R = 5.0V$, $T_J = 25^\circ C$

*Pulse test: Pulse width 300 μ sec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range

T_{STG}

$-65^\circ C$ to $175^\circ C$

Operating junction temp range

T_J

$-40^\circ C$ to $175^\circ C$

Maximum thermal resistance

$R_{\theta JC}$

$1.0^\circ C/W$ Junction to case

Typical thermal resistance (greased)

$R_{\theta CS}$

$0.5^\circ C/W$ Case to sink

Mounting torque

25-30 inch pounds

Weight

.54 ounces (15.3 grams) typical

SBR60150

Figure 1
Typical Forward Characteristics

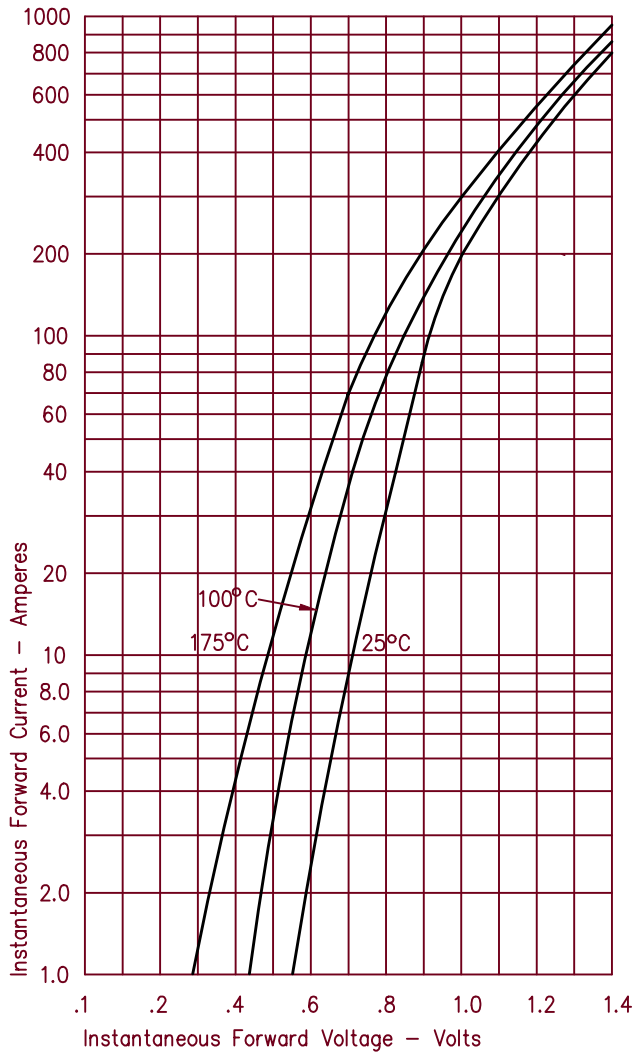


Figure 3
Typical Junction Capacitance

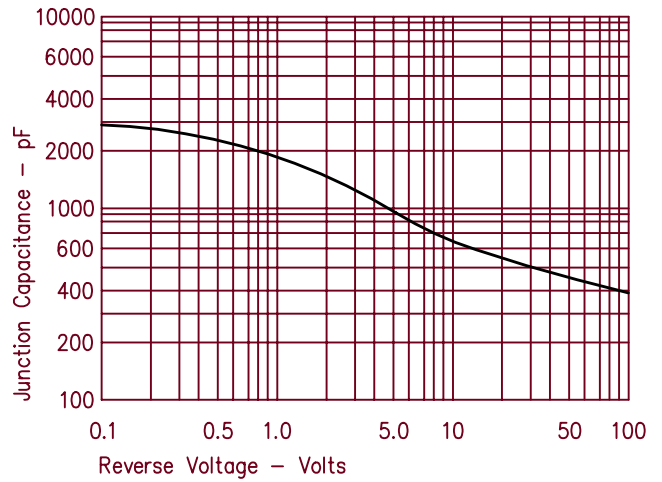


Figure 4
Forward Current Derating

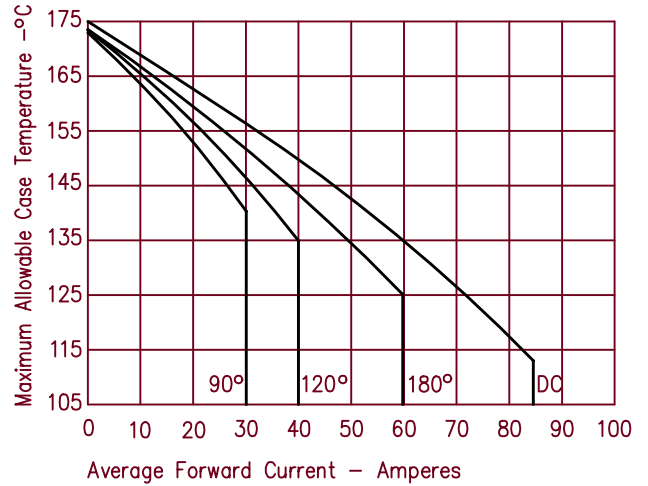


Figure 2
Typical Reverse Characteristics

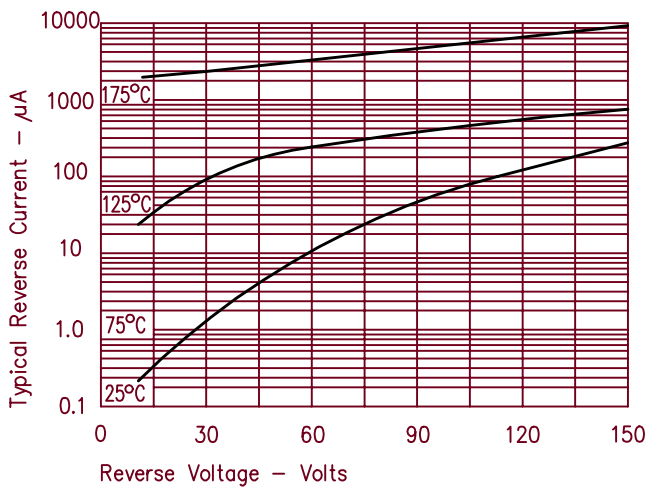


Figure 5
Maximum Forward Power Dissipation

