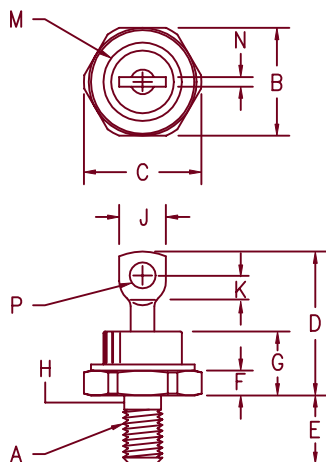


# 60 Amp Schottky Rectifier SBR60150



- 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	Working Peak Reverse Voltage	Peak Reverse Voltage
SBR60150*	150V	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, $R_{\theta JC} = 1.0 \text{ } ^\circ C/W$
Maximum surge current	$I_{FSM}$ 1000 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max repetitive peak reverse current	$I_R(OV)$ 2 Amp	$f = 1 \text{ KHz}$ , $25^\circ C$ , 1 $\mu\text{sec}$ 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	$I_{RM}$ 3 mA	$V_{RRM}, T_J = 125^\circ C *$
Max peak reverse current	$I_{RM}$ 1 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  $\mu\text{sec}$ , 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

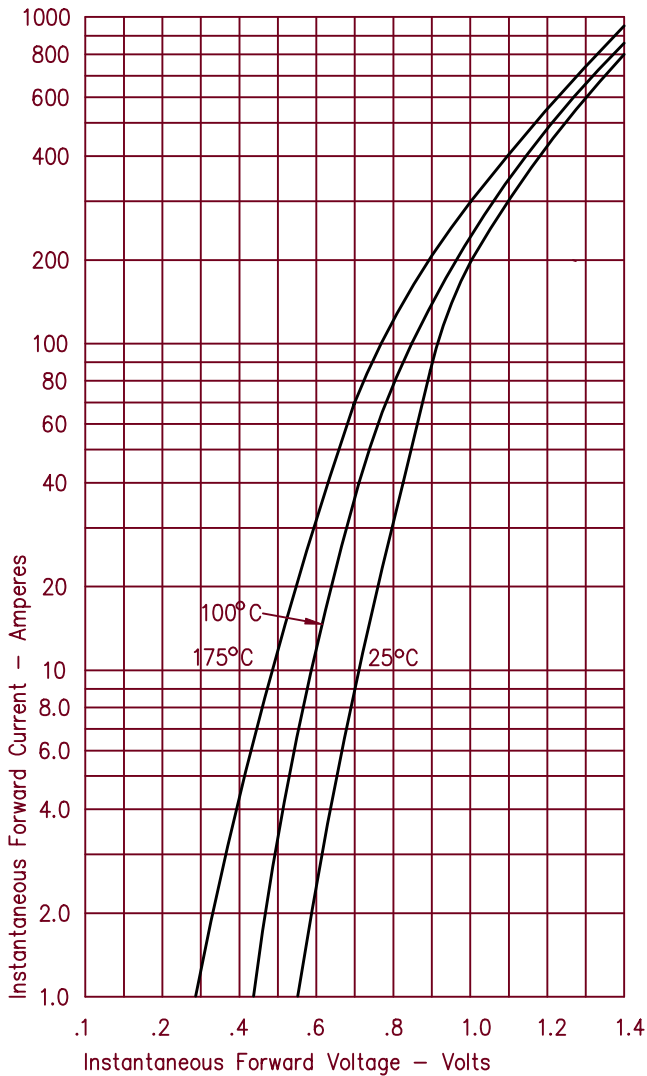


Figure 3  
Typical Junction Capacitance

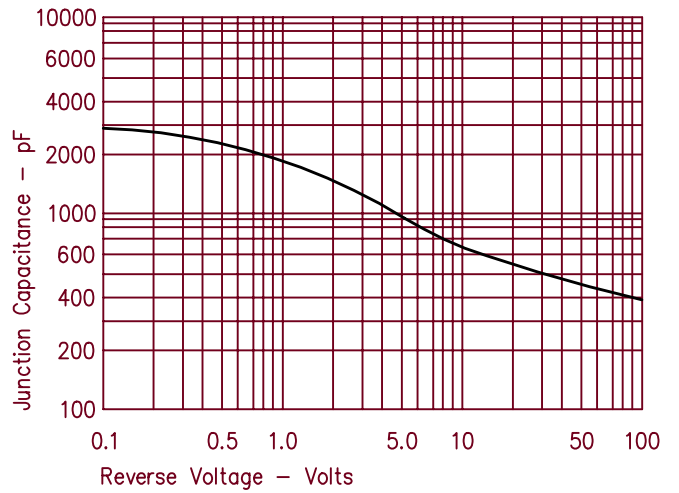


Figure 4  
Forward Current Derating

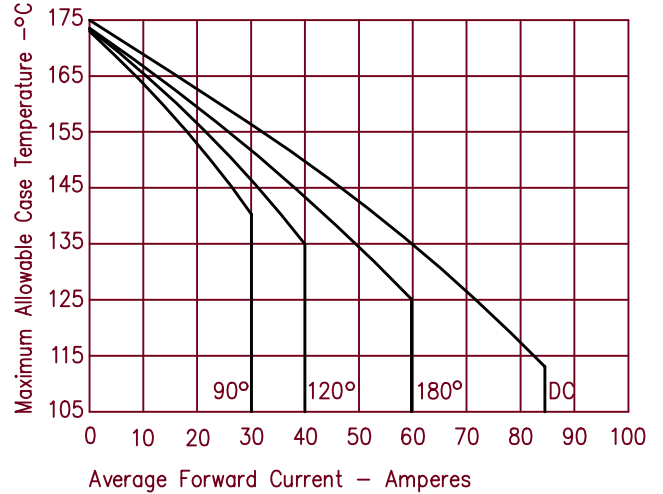


Figure 2  
Typical Reverse Characteristics

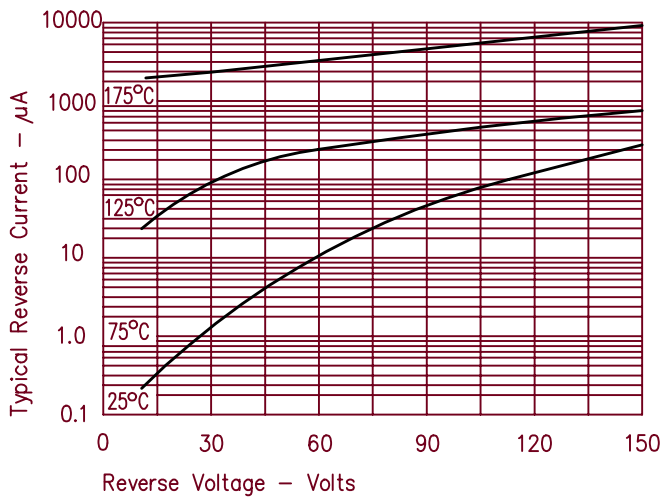


Figure 5  
Maximum Forward Power Dissipation

