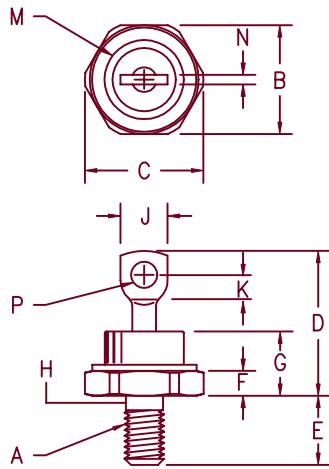


Schottky OR'ing Diode SBR8210, SBR8215



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 (D0-5)

Microsemi Catalog Number	Working Reverse Voltage	Peak Reverse Voltage	Repetitive Peak Reverse Voltage
SBR8210*	10V		10V
SBR8215*	15V		15V

*Add Suffix R For Reverse Polarity

- Schottky Barrier Rectifier
- Low Forward Voltage
- Guard Ring Protection
- 150°C Junction Temperature
- V_{RRM} – 10 to 15 Volts

Electrical Characteristics

Average forward current,	I _{F(AV)} = 80 Amps	T _C = 103°C, Square wave, R _{θJC} = 1.0 °C/W
Maximum surge current,	I _{FSM} = 1200 Amps	8.3 ms, half sine T _J = 150°C
Max repetitive peak reverse current	I _{R(OV)} = 2 Amps	f = 1 KHz, 25°C, 1 μsec Square wave
Max peak forward voltage,	V _{FM} = .38 Volts	I _{FM} = 80A, T _J = 150°C*
Max peak forward voltage,	V _{FM} = .50 Volts	I _{FM} = 80A, T _J = 25°C*
Max peak reverse current	I _{RM} = 1.5 A	V _{RRM} , T _J = 125°C*
Max peak reverse current	I _{RM} = 5.0 mA	V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J = 4600 pF	V _R = 5.0V, T _J = 25°C

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

Thermal and Mechanical Characteristics

Storage temp range	T _{STG}	-65°C to +175°C
Operating junction temp range	T _J	-65°C to +150°C
Max thermal resistance	R _{θJC}	1.0 °C/W Junction to case
Typical thermal resistance (greased)	R _{θCS}	0.5° C/W Case to sink
Mounting torque		25-30 inch pounds
Weight		.54 ounce (15.3 grams) typical

SBR8210, SBR8215

Figure 1
Typical Forward Characteristics

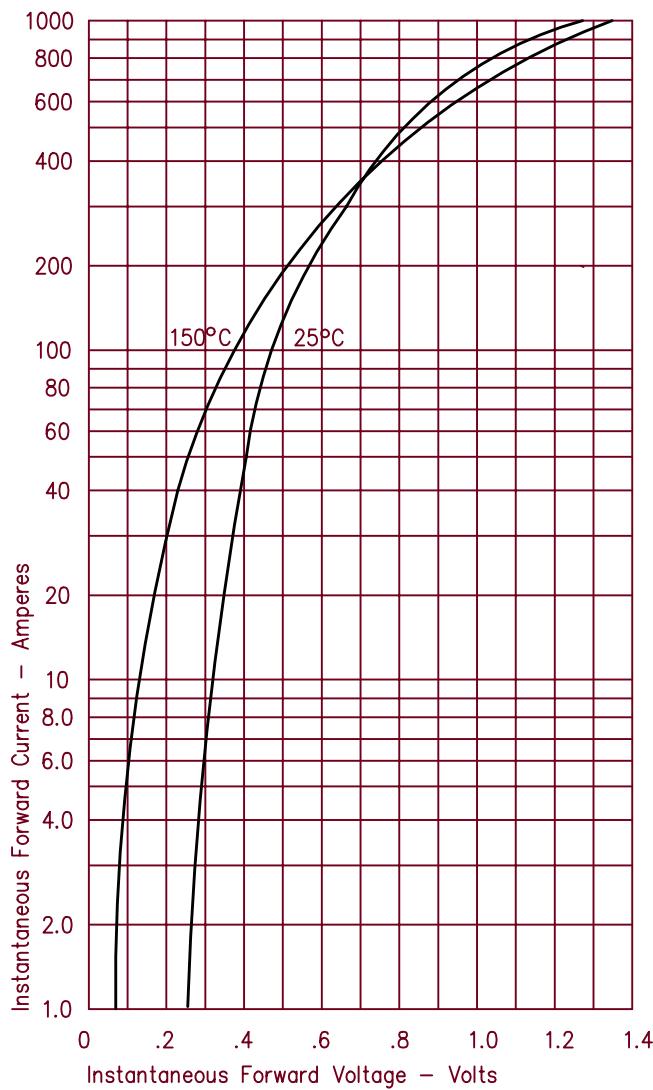


Figure 2
Typical Reverse Characteristics

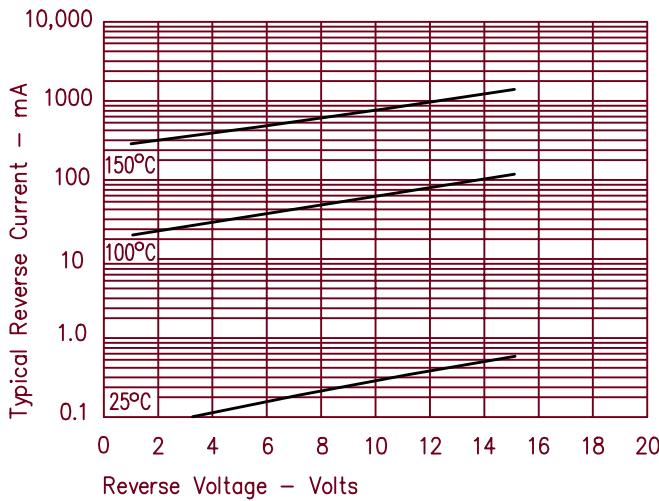


Figure 3
Typical Junction Capacitance

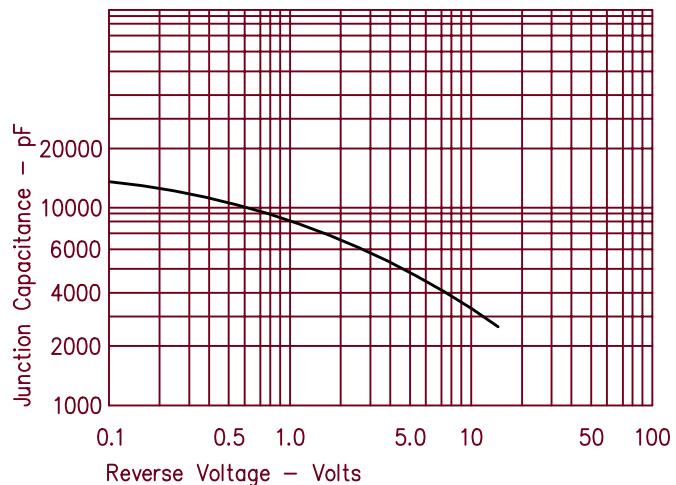


Figure 4
Forward Current Derating

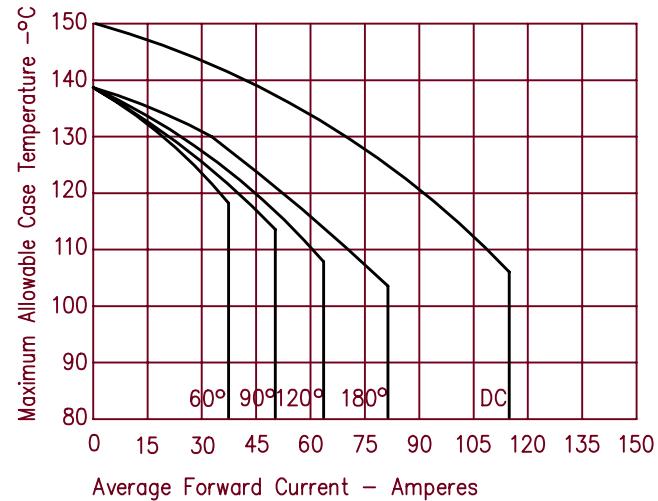


Figure 5
Maximum Forward Power Dissipation

