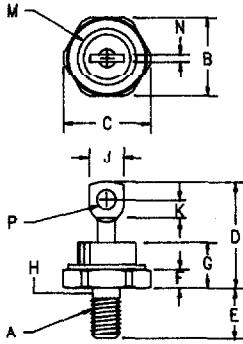


Schottky OR'ing Diode SBR 82



- Notes:
 1. Full threads within 2 1/2 threads
 2. Standard Polarity; Stud is Cathode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1/4-28
B	.677	.687	17.19	17.44	
C	---	.793	---	20.14	
D	---	1.00	---	25.40	
E	.432	.442	10.97	11.22	
F	.125	.135	3.17	3.42	
G	.323	.450	8.20	11.43	
H	.220	.249	5.58	6.32	1
J	---	.375	---	9.52	
K	.156	---	3.96	---	
M	---	.510	---	12.95	Dia
N	---	.080	---	2.03	
P	.140	.175	3.55	4.45	Dia

D0203AB (D05)

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

- Schottky Barrier Rectifier
- Low forward voltage
- Guard Ring Protected
- 150°C Junction Temperature
- VRRM -10 to 15 Volts

Electrical Characteristics

Average forward current per leg	I _{F(AV)} 80 Amps	T _C = 100°C, Square wave, R _{θJC} = 1.0°C/W
Maximum surge current per leg	I _{FSM} 1200 Amps	8.3ms, half sine, T _J = 150°C
Max repetitive peak reverse current	I _{R(0V)} 2 Amp	f = 1 KHz, 25°C, 1 μsec Square wave
Max peak forward voltage	V _{FM} 50 Volts	I _{FM} = 80A: 25°C*
Max peak forward voltage	V _{FM} 38 Volts	I _{FM} = 80A: 150°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 reverse current	I _{RM} 650 μA	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 150°C
Operating junction temp range	T _J	-65°C to 150°C
Max thermal resistance		1.0°C/W
Typical thermal resistance		0.0°C/W
Max mounting torque		30 inch pounds maximum
Typical Weight		.54 ounces (15.3 grams) typical

Microsemi Corp.
Colorado

SBR 82



Figure 1
Typical Forward Characteristics

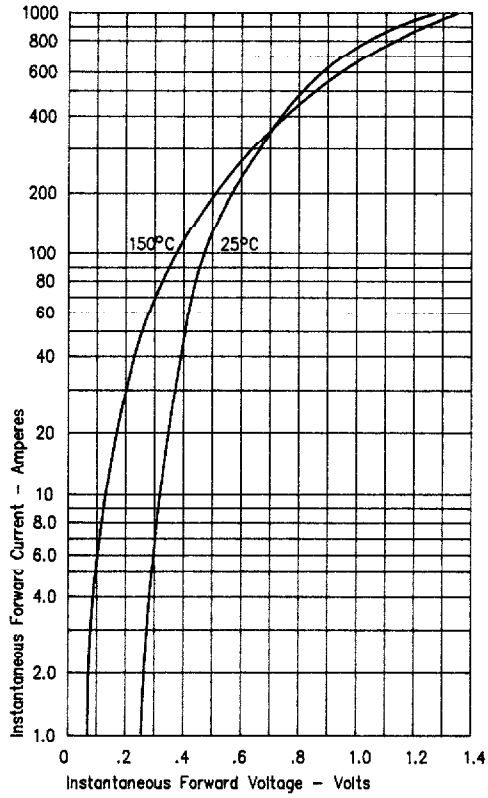


Figure 3
Typical Junction Capacitance

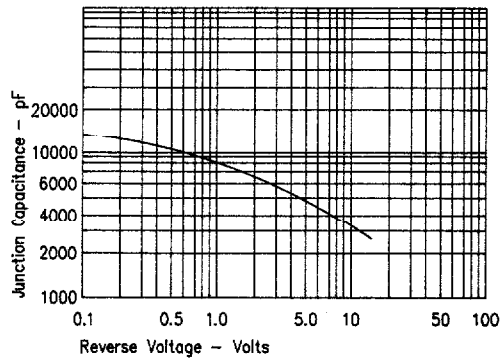


Figure 4
Forward Current Derating

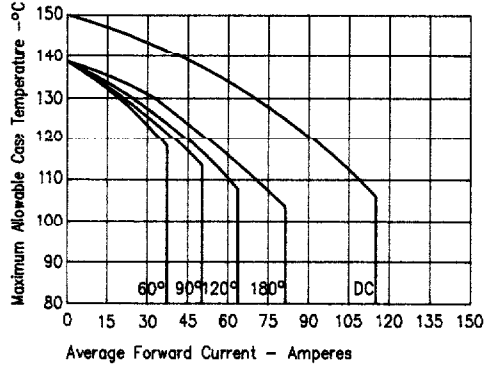


Figure 2
Typical Reverse Characteristics

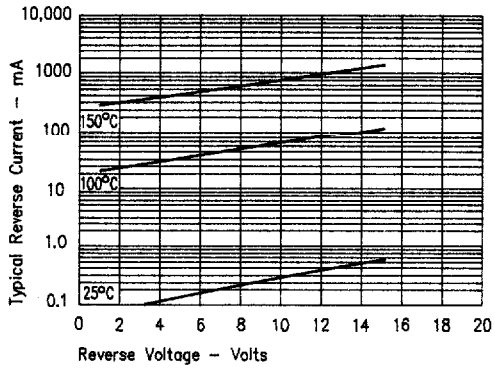


Figure 5
Maximum Forward Power Dissipation

