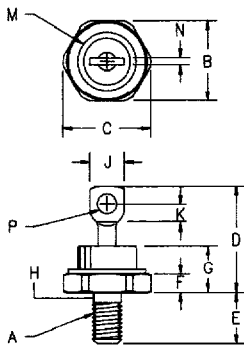


60 Amp Schottky Rectifier SBR60 Series



- 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	.677	.687	17.19	17.44	
C	---	.793	---	20.14	
D	---	1.00	---	25.40	
E	.427	.447	10.84	11.35	
F	.115	.200	2.92	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

D0203AB (D05)

Microsemi Catalog
Number

SBR6030
SBR6035
SBR6040
SBR6045

Peak Reverse
Voltage

30V
35V
40V
45V

- Schottky Barrier Rectifier
- Low forward voltage
- Guard Ring Protected
- 150°C Junction Temperature
- V_{RRM} -30 to 45 Volts

Electrical Characteristics

Average forward current per leg	$I_F(AV)$ 60 Amps	$T_C = 89^\circ C$, Square wave, $R_{\theta JC} = 1.0^\circ C/W$
Maximum surge current per leg	I_{FSM} 1000 Amps	8.3ms, half sine, $T_J = 125^\circ C$
Max repetitive peak reverse current	$I_R(0V)$ 2 Amp	$f = 1$ KHz, $25^\circ C$, 1 μsec Square wave
Max peak forward voltage	V_{FM} .60 Volts	$I_{FM} = 60A: 25^\circ C *$
Max peak forward voltage	V_{FM} .58 Volts	$I_{FM} = 60A: 125^\circ C *$
Max peak reverse current	I_{RM} 600 mA	$V_{RRM}, T_J = 125^\circ C *$
Max peak reverse current	I_{RM} 2.0 mA	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	C_J 2700 pF	$V_R = 5.0V, T_J = 25^\circ C$

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

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	$-65^\circ C$ to $150^\circ C$
Operating junction temp range	T_J	$-65^\circ C$ to $125^\circ C$
Max thermal resistance	$R_{\theta JC}$	$1.0^\circ C/W$ Junction to Case
Typical thermal resistance	$R_{\theta JC}$	$0.9^\circ C/W$ Junction to Case
Max mounting torque		30 inch pounds maximum
Typical Weight		.54 ounces (15.3 grams) typical

Microsemi Corp.
Colorado

C-108

PH: 303-469-2161
FAX: 303-466-3775

SBR60

C

Figure 1
Typical Forward Characteristics

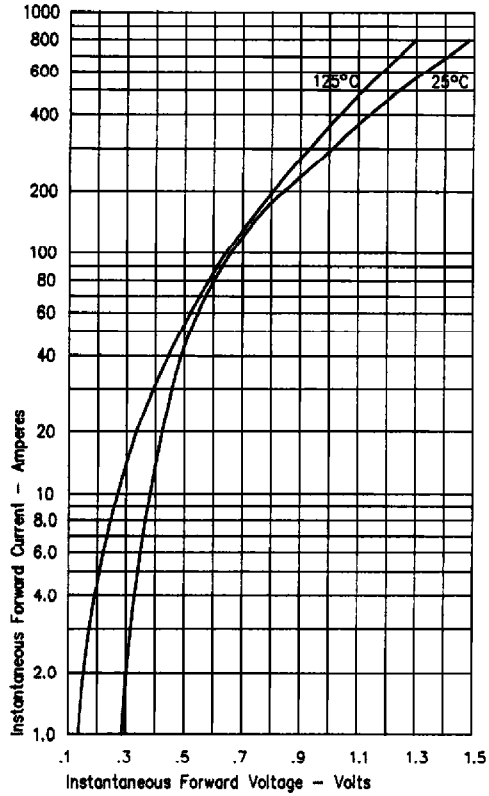


Figure 3
Typical Junction Capacitance

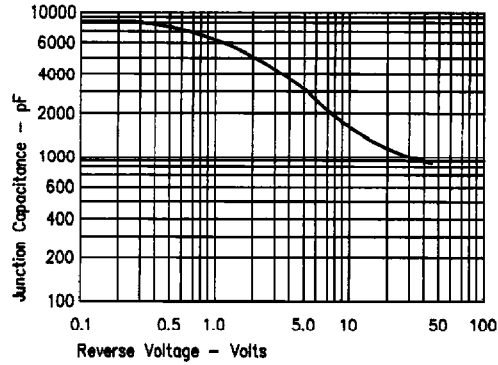


Figure 4
Forward Current Derating

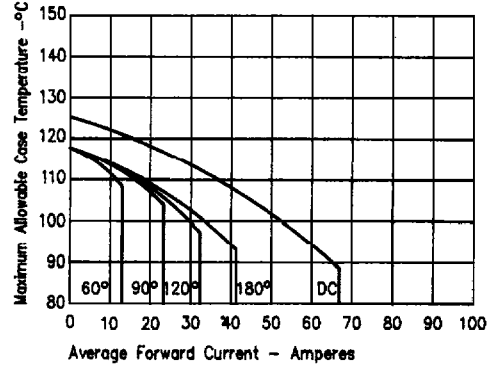


Figure 2
Typical Reverse Characteristics

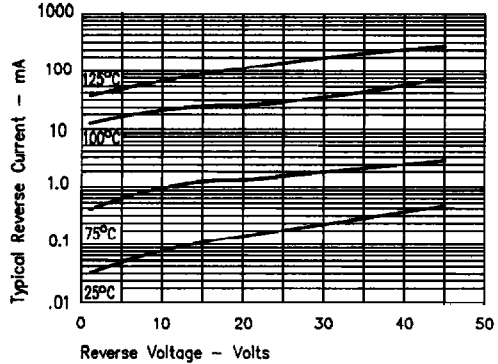


Figure 5
Maximum Forward Power Dissipation

