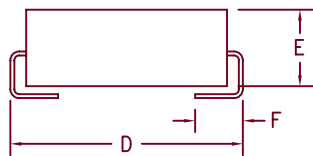
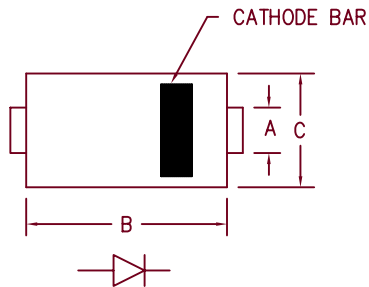


1 Amp Schottky Rectifier

HSM180J — HSM1100J



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.073	.087	1.85	2.21	
B	.160	.180	4.06	4.57	
C	.130	.155	3.30	3.94	
D	.205	.220	5.21	5.59	
E	.075	.130	1.91	3.30	
F	.030	.060	.760	1.52	

DO-214BA Package

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
HSM180J	SK18	80V	80V
HSM190J	MBRS190TR MBRS190T3	90V	90V
HSM1100J	10BQ100 10MQ100N MBRS1100T3 SK110	100V	100V

- Underwriters Laboratory Flammability Class 94V-0
- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- Surface mount package

Electrical Characteristics

Average forward current
Maximum surge current
Max peak forward voltage
Max peak forward voltage
Max peak reverse current
Typical junction capacitance

I_{F(AV)} 1.0 Amps
I_{FSM} 40 Amps
V_{FM} .57 Volts
V_{FM} .84 Volts
I_{RM} 100 μ A
C_J 45pF

T_L = 140°C, Square wave, R θ JL = 15°C/W
8.3ms, half sine, T_J = 175°C
I_{FM} = 0.1A: T_J = 25°C*
I_{FM} = 1.0A: T_J = 25°C*
V_{RRM}, T_J = 25°C
V_R = 5.0V, T_J = 25°C

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

Thermal and Mechanical Characteristics

Storage temperature range
Operating junction temp range
Maximum thermal resistance
Weight

T_{STG}
T_J
R θ JL

-55°C to 175°C
-55°C to 175°C
15°C/W junction to lead
.0047 ounces (.013 grams) typical



8700 East Thomas Road, P.O. Box 1390
Scottsdale, AZ 85252
PH: (480) 941-6300
FAX: (480) 947-1503
www.microsemi.com

05-15-07 Rev. 5

HSM180J — HSM1100J

Figure 1
Typical Forward Characteristics

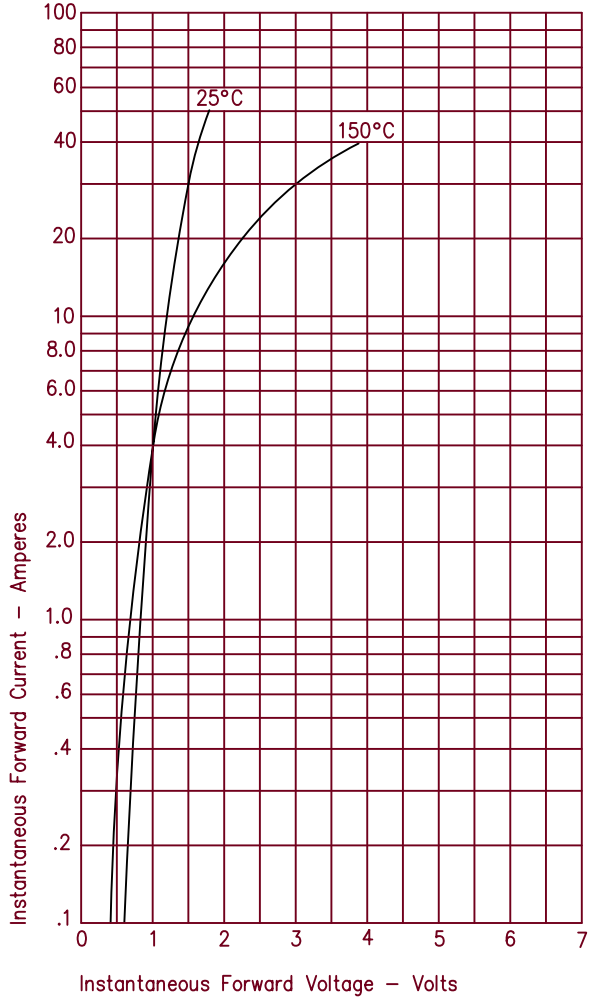


Figure 3
Typical Junction Capacitance

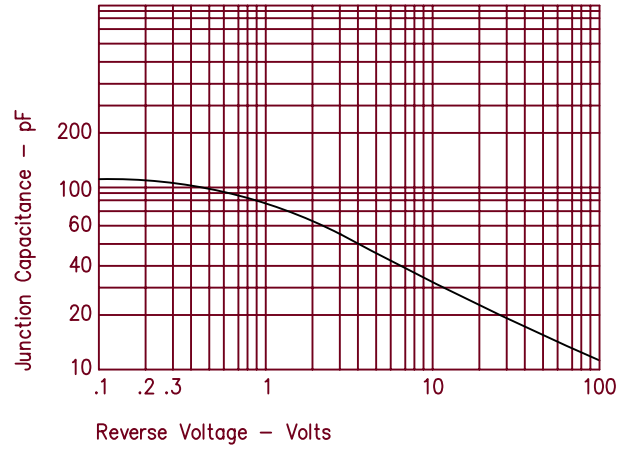


Figure 2
Typical Reverse Characteristics

