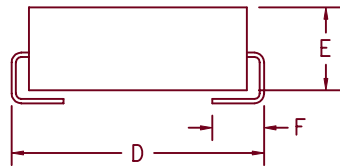
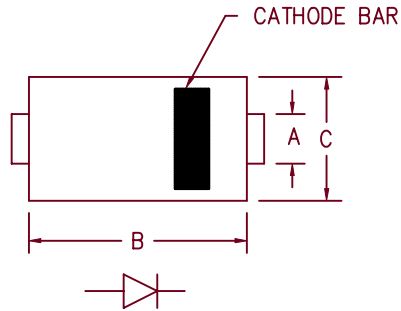


1 Amp Schottky Rectifier HSM180J — HSM1100J



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	

D0-214BA Package

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	Device Marking
HSM180J	80V	80V	H180
HSM190J	90V	90V	H190
HSM1100J	100V	100V	H100

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

Electrical Characteristics

Average forward current	$I_F(AV)$ 1.0 Amps	$T_L = 140^\circ\text{C}$, Square wave, $R_{\theta JL} = 15^\circ\text{C/W}$
Maximum surge current	I_{FSM} 40 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max peak forward voltage	V_{FM} .51 Volts	$I_{FM} = 0.1A; T_J = 25^\circ\text{C}^*$
Max peak forward voltage	V_{FM} .84 Volts	$I_{FM} = 1.0A; T_J = 25^\circ\text{C}^*$
Max peak reverse current	I_{RM} 100 μA	$V_{RRM}, T_J = 25^\circ\text{C}$
Typical junction capacitance	C_J 45pF	$V_R = 5.0V, T_J = 25^\circ\text{C}$

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

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	-55°C to 175°C
Operating junction temp range	T_J	-55°C to 175°C
Maximum thermal resistance	$R_{\theta JL}$	15°C/W junction to lead
Weight		.0047 ounces (.013 grams) typical

3-29-00 Rev. 1

HSM180J — HSM1100J

Figure 1
Typical Forward Characteristics

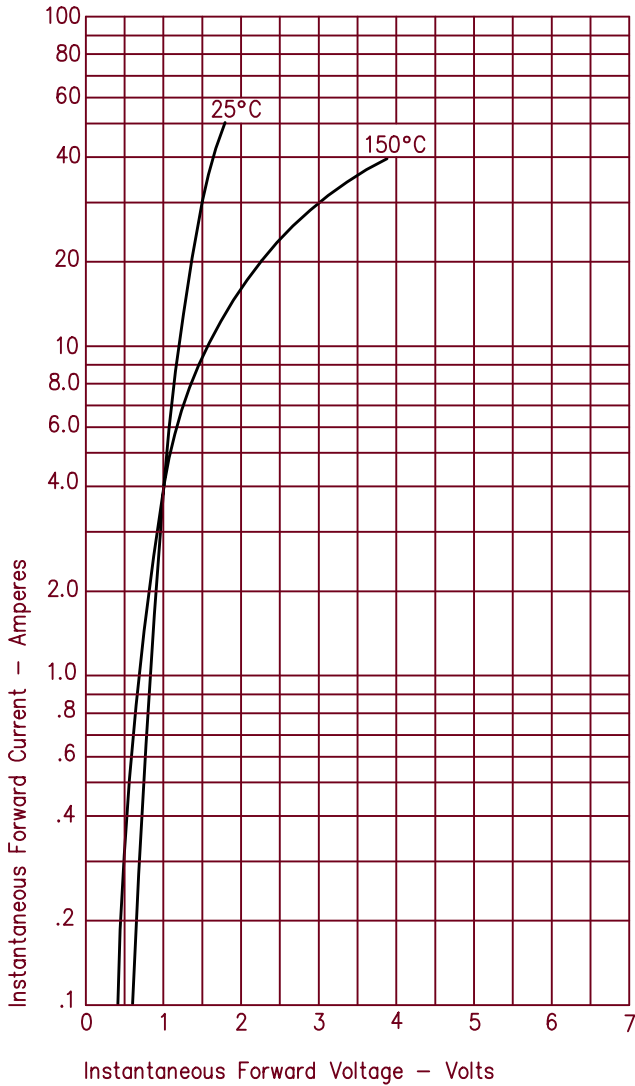


Figure 3
Typical Junction Capacitance

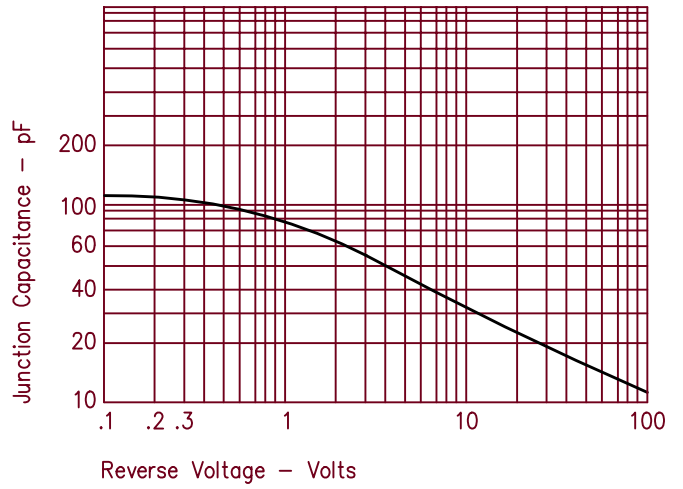


Figure 2
Typical Reverse Characteristics

