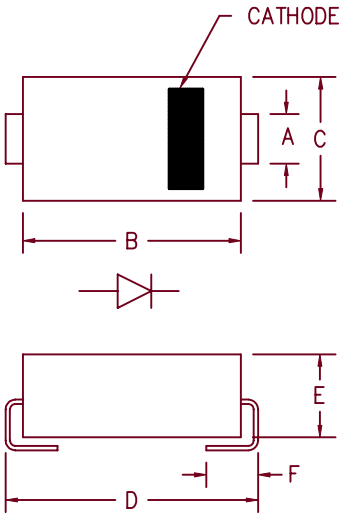
1 Amp Schottky Rectifier
HSM180J – HSM1100J



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
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	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	Device Marking
HSM180J	80V	80V	H180
HSM190J	90V	90V	H190
HSM1100J	100V	100V	H100

- Uderwriters 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°C, Square wave, $R_{\Theta JL}$ = 15°C/W
Maximum surge current	I_{FSM} 40 Amps	8.3ms, half sine, T_J = 175°C
Max peak forward voltage	V_{FM} .51 Volts	I_{FM} = 0.1A; T_J = 25°C *
Max peak forward voltage	V_{FM} .84 Volts	I_{FM} = 1.0A; T_J = 25°C *
Max peak reverse current	I_{RM} 100 µA	V_{RRM}, T_J = 25°C
Typical junction capacitance	C_J 45pF	V_R = 5.0V, T_J = 25°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

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HSM180J – HSM1100J

Figure 1
Typical Forward Characteristics

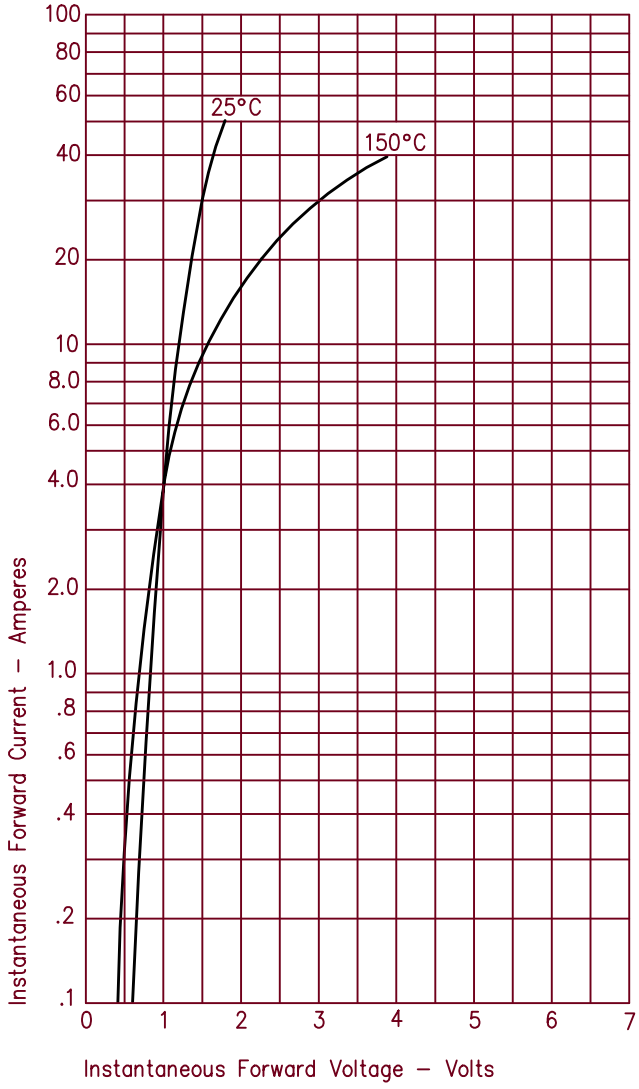


Figure 2
Typical Reverse Characteristics

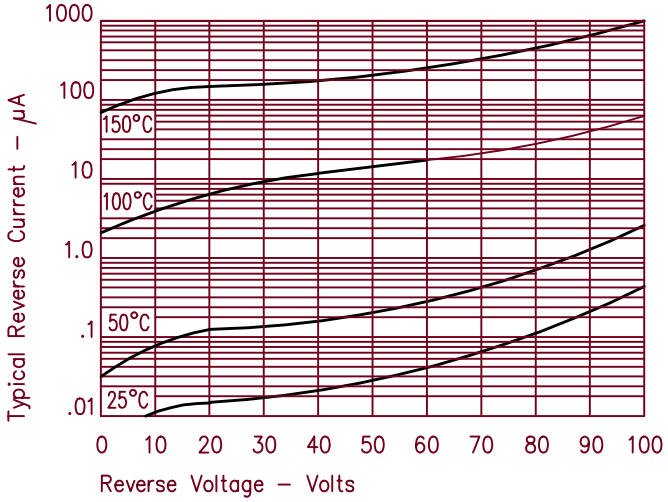
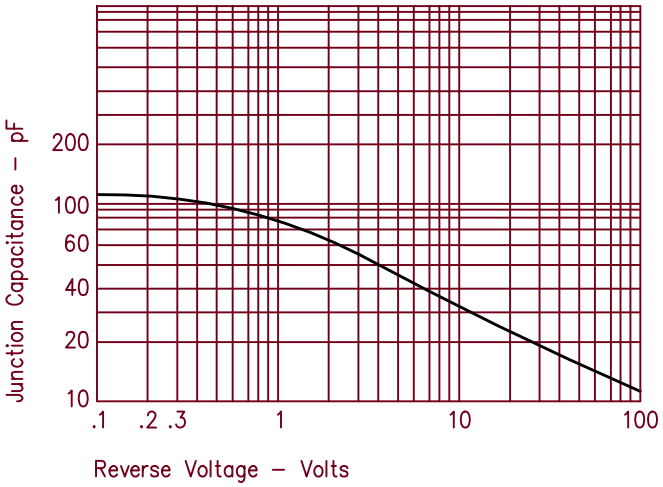


Figure 3
Typical Junction Capacitance



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