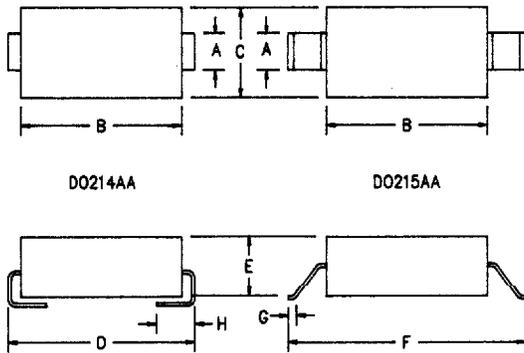




# 1 Amp Schottky Rectifier HSM180\*, HSM190\*



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.081	.087	2.06	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	.095	1.90	2.41	
F	.270	.290	6.86	7.37	
G	.015	.030	.381	.762	
H	.030	.060	.760	1.52	

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
HSM180*	80V	80V
HSM190*	90V	90V

\* Add Suffix J for J Lead or G for Gull Wing Lead Configuration

- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- VRRM 80 to 90 Volts
- Economical Surface Mount Package

Electrical Characteristics		
Average forward current	I <sub>F(AV)</sub> 1.0 Amps	Square wave
Maximum surge current	I <sub>FSM</sub> 75 Amps	8.3ms, half sine, T <sub>J</sub> = 150°C
Max peak forward voltage	V <sub>FM</sub> .53 Volts	I <sub>FM</sub> = 0.1A; T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub> .81 Volts	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C*
Max peak reverse current	I <sub>RM</sub> 100 μA	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 45pF	V <sub>R</sub> = 5.0V, T <sub>J</sub> = 25°C

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

Thermal and Mechanical Characteristics		
Storage temperature range	T <sub>STG</sub>	-40°C to 175°C
Operating junction temp range	T <sub>J</sub>	-40°C to 150°C
Weight		.0047 ounces (.013 grams) typical

**Microsemi Corp.**  
**Colorado**

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

# HSM180\*, HSM190\*

Figure 1  
Typical Forward Characteristics

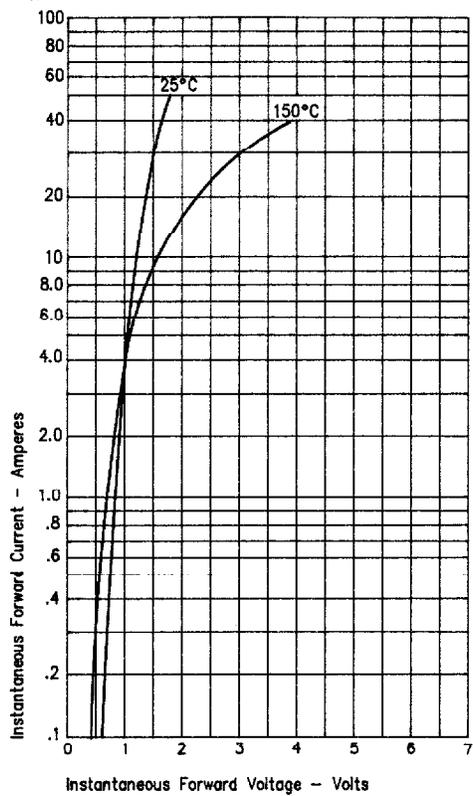


Figure 3  
Typical Junction Capacitance

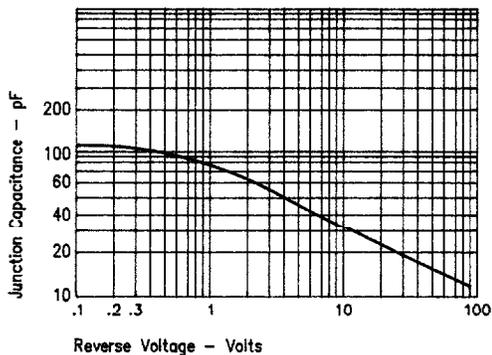


Figure 2  
Typical Reverse Characteristics

