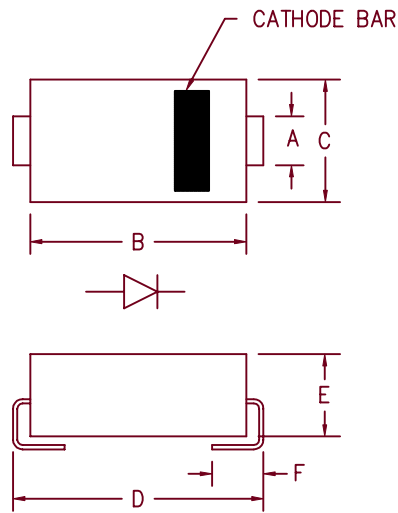


# 1 Amp Schottky Rectifier HSM180J — HSM1100J



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	Industry Part Number	Working Reverse Voltage	Peak Reverse Voltage	Repetitive Peak Reverse Voltage
HSM180J	SK18	80V	80V	80V
HSM190J	MBR5190TR MBR5190T3	90V	90V	90V
HSM1100J	10BQ100 10MQ100N MBR51100T3 SK110	100V	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  $\mu$ A  
 $C_J$  45pF

$T_L = 140^\circ\text{C}$ , Square wave,  $R_{\theta JL} = 15^\circ\text{C/W}$   
8.3ms, half sine,  $T_J = 175^\circ\text{C}$   
 $I_{FM} = 0.1\text{A}; T_J = 25^\circ\text{C}^*$   
 $I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$   
 $V_{RRM}, T_J = 25^\circ\text{C}$   
 $V_R = 5.0\text{V}, T_J = 25^\circ\text{C}$

\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range  
Operating junction temp range  
Maximum thermal resistance  
Weight

$T_{STG}$   
 $T_J$   
 $R_{\theta JL}$

$-55^\circ\text{C}$  to  $175^\circ\text{C}$   
 $-55^\circ\text{C}$  to  $175^\circ\text{C}$   
 $15^\circ\text{C/W}$  junction to lead  
.0047 ounces (.013 grams) typical

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# HSM180J — HSM1100J

Figure 1  
Typical Forward Characteristics

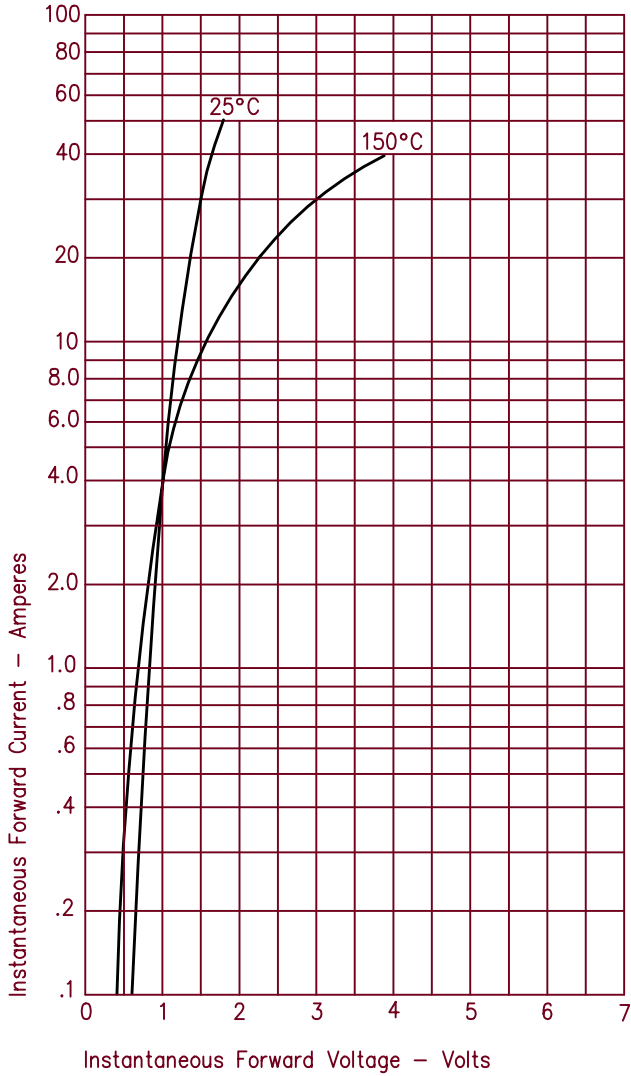


Figure 3  
Typical Junction Capacitance

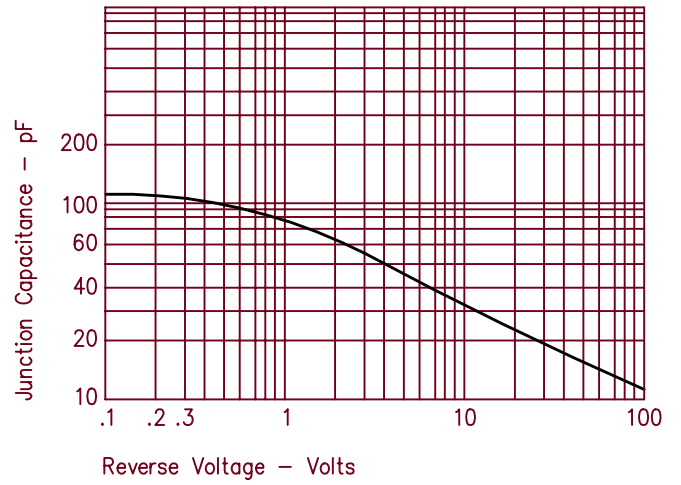


Figure 2  
Typical Reverse Characteristics

