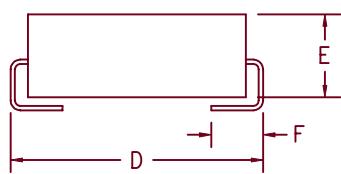
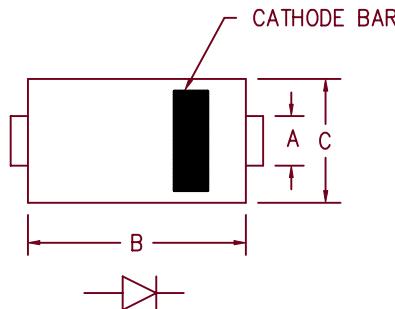


1 Amp Schottky Rectifier

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 | 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
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 .51 Volts
V FM .84 Volts
I RM 100 μ A
C J 45pF

T_L = 140°C, Square wave, R_{θJL} = 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_{θJL}

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

3-29-00 Rev. 1



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Broomfield, CO 80020
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www.microsemi.com

HSM180J – HSM1100J

Figure 1
Typical Forward Characteristics

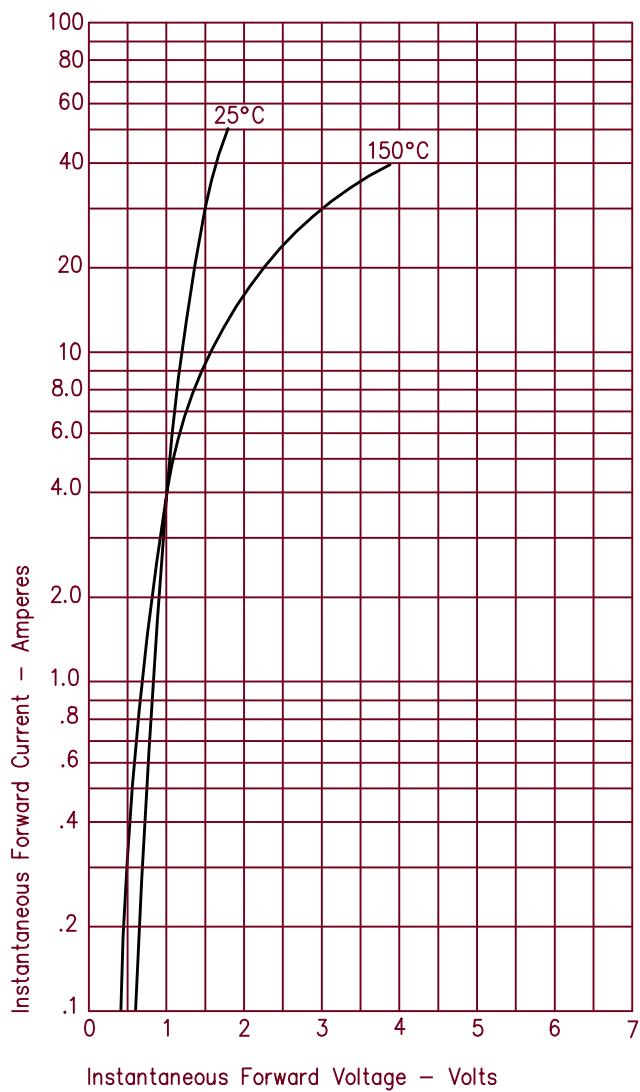


Figure 3
Typical Junction Capacitance

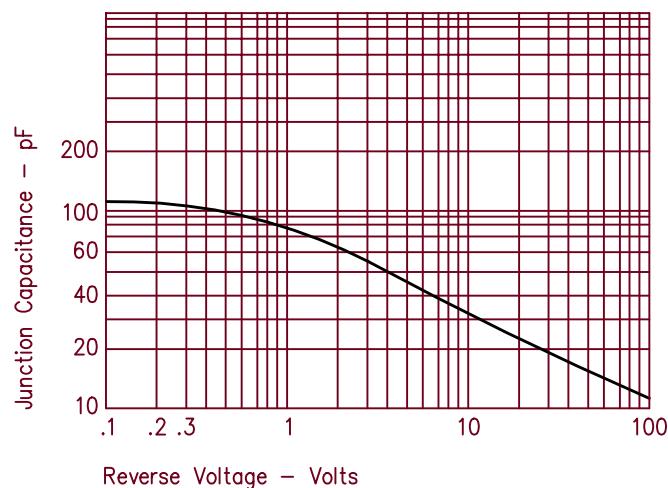


Figure 2
Typical Reverse Characteristics

