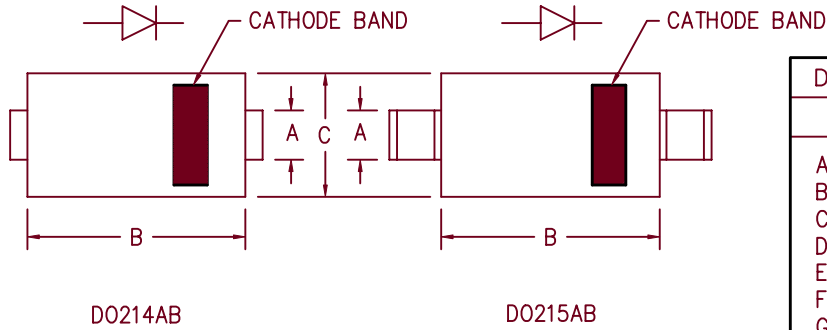
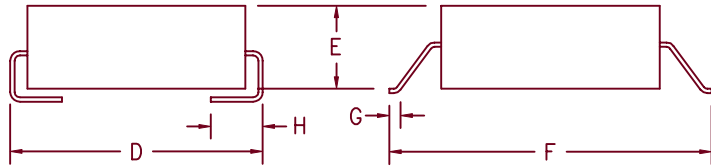


# 8 Amp Schottky Rectifier HSM880 — HSM8100



| Dim. | Inches  |         | Millimeter |         | Notes |
|------|---------|---------|------------|---------|-------|
|      | Minimum | Maximum | Minimum    | Maximum |       |
| A    | .117    | .123    | 2.97       | 3.12    |       |
| B    | .260    | .280    | 6.60       | 7.11    |       |
| C    | .220    | .245    | 5.59       | 6.22    |       |
| D    | .307    | .322    | 7.80       | 8.18    |       |
| E    | .075    | .095    | 1.91       | 2.41    |       |
| F    | .380    | .400    | 9.65       | 10.16   |       |
| G    | .025    | .040    | .640       | 1.02    |       |
| H    | .030    | .060    | .760       | 1.52    |       |



Microsemi  
Catalog Number

HSM880\*  
HSM890\*  
HSM8100\*

Working Peak  
Reverse Voltage

80V  
90V  
100V

Repetitive Peak  
Reverse Voltage

80V  
90V  
100V

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

- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- High Current Capability
- $V_{RRM}$  80 to 100 Volts
- Surface mount packages

## Electrical Characteristics

|                              |                      |                                       |
|------------------------------|----------------------|---------------------------------------|
| Average forward current      | $I_F(AV)$ 8.0 Amps   | Square wave                           |
| Maximum surge current        | $I_F(AV)$ 300 Amps   | 8.3ms, half sine, $T_J = 175^\circ C$ |
| Max peak forward voltage     | $V_{FM}$ .61 Volts   | $I_{FM} = 8.0A; T_J = 175^\circ C^*$  |
| Max peak forward voltage     | $V_{FM}$ .78 Volts   | $I_{FM} = 8.0A; T_J = 25^\circ C^*$   |
| Max peak reverse current     | $I_{RM}$ 500 $\mu A$ | $V_{RRM}, T_J = 25^\circ C$           |
| Typical junction capacitance | $C_J$ 480pF          | $V_R = 5.0V, T_J = 25^\circ C$        |

\* Pulse test: Pulse width 300  $\mu sec$ , 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    | $R_{\theta JL}$ | 20°C/W Junction to lead         |
| Weight                        |                 | .008 ounces (.22 grams) typical |

# HSM880 — HSM8100

Figure 1  
Typical Forward Characteristics

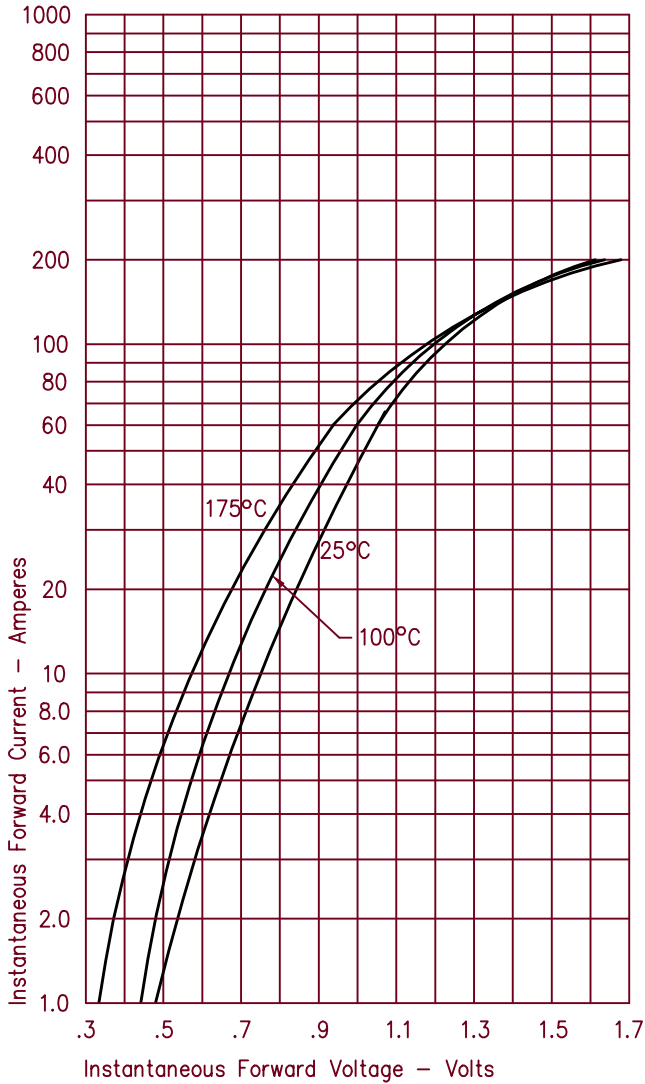


Figure 3  
Typical Junction Capacitance

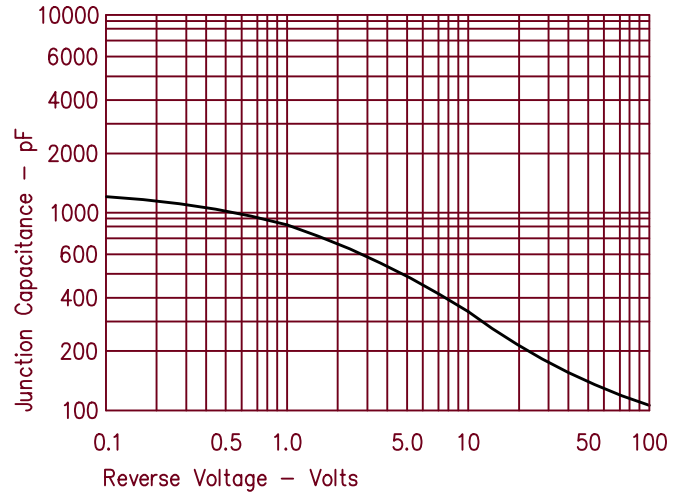


Figure 2  
Typical Reverse Characteristics

