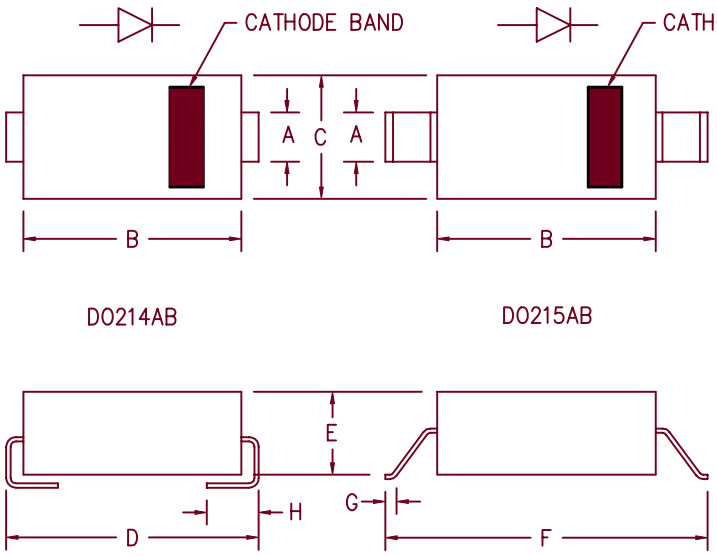
# 8 Amp Schottky Rectifier

# HSM880 – HSM8100




| Dim. | Inches | | Millimeter | | |
|---|---|---|---|---|---|
| | Minimum | Maximum | Minimum | Maximum | Notes |
| 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 | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage |
|---|---|---|
| HSM880* | 80V | 80V |
| HSM890* | 90V | 90V |
| HSM8100* | 100V | 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°C |
| Max peak forward voltage | $V_{FM}$ .61 Volts | $I_{FM}$ = 8.0A; $T_J$ = 175°C * |
| Max peak forward voltage | $V_{FM}$ .78 Volts | $I_{FM}$ = 8.0A; $T_J$ = 25°C * |
| Max peak reverse current | $I_{RM}$ 500 µA | $V_{RRM}$, $T_J$ = 25°C |
| Typical junction capacitance | $C_J$ 480pF | $V_R$ = 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 | $R_{\theta JL}$ | 20°C/W Junction to lead |
| Weight | | .008 ounces (.22 grams) typical |

3–29–00 Rev. 2

COLORADO Microsemi
800 Hoyt Street
Broomfield, CO. 80020
PH: (303) 469–2161
FAX: (303) 466–3775
www.microsemi.com

# HSM880 – HSM8100

Figure 1
Typical Forward Characteristics

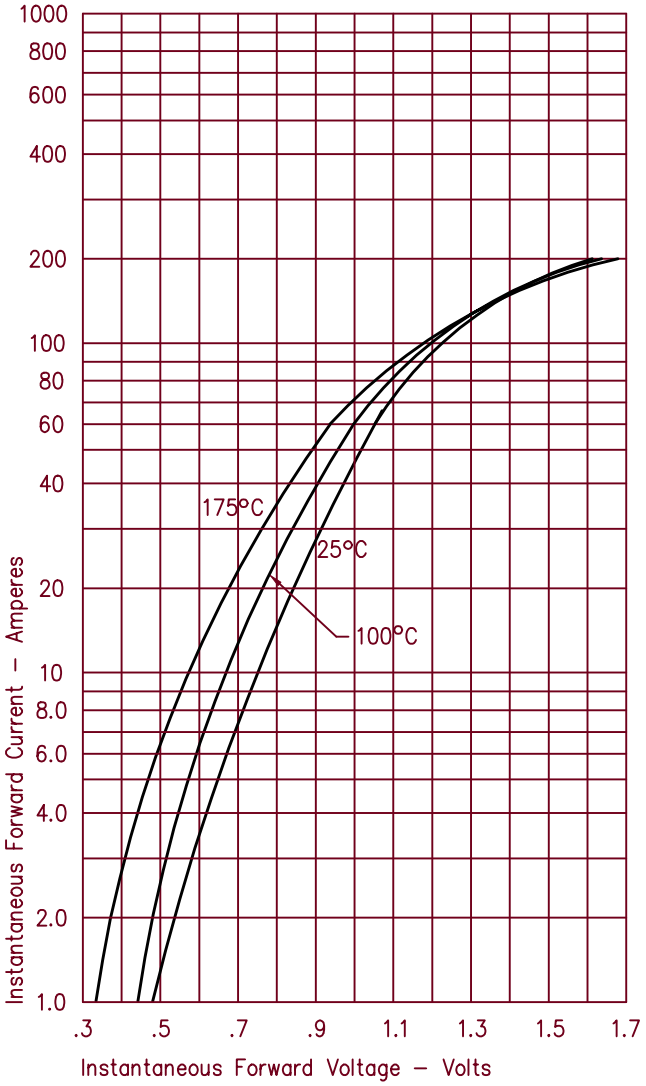



Figure 2
Typical Reverse Characteristics

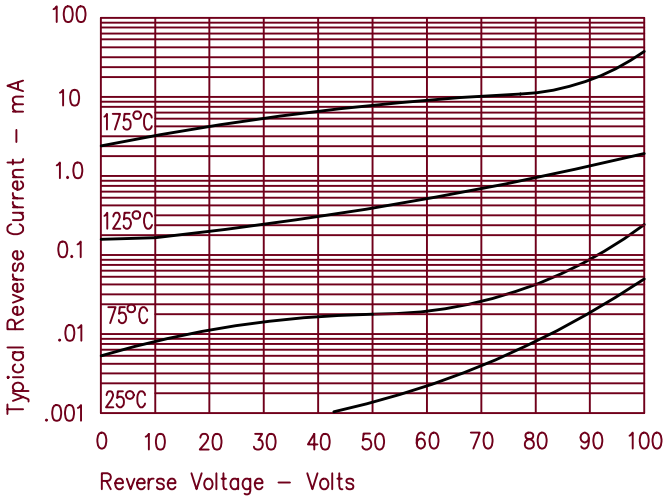



Figure 3
Typical Junction Capacitance

