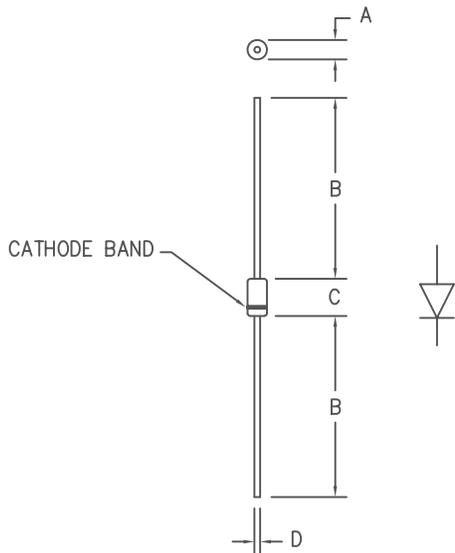


# 1 Amp Schottky Rectifier MS110



| Dim. | Inches  |         | Millimeter |         | Notes |
|------|---------|---------|------------|---------|-------|
|      | Minimum | Maximum | Minimum    | Maximum |       |
| A    | .081    | .107    | 2.057      | 2.718   | Dia.  |
| B    | 1.10    | ---     | 27.94      | ---     |       |
| C    | .160    | .205    | 4.064      | 5.207   |       |
| D    | .028    | .034    | .711       | .864    | Dia.  |

PLASTIC D041

| Microsemi Catalog Number | Industry Part Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage |
|--------------------------|----------------------|------------------------------|---------------------------------|
| MS110                    | MBR1100<br>SR1010    | 100V                         | 100V                            |

- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- $V_{RRM}$  100 Volts

| Electrical Characteristics                             |                      |   |  |
|--|----------------------|---|--|
| Average forward current                                | $I_F(AV)$ 1.0 Amps   | TL = 118°C Square wave, $R_{\theta JL} = 25^\circ C/W$ , L = 1/4" |  |
| Maximum surge current                                  | $I_{FSM}$ 50 Amps    | 8.3ms, half sine, $T_J = 175^\circ C$                             |  |
| Max peak forward voltage                               | $V_{FM}$ .83 Volts   | $I_{FM} = 1.0A; T_J = 25^\circ C^*$                               |  |
| Max peak reverse current                               | $I_{RM}$ 100 $\mu A$ | $V_{RRM}, T_J = 25^\circ C$                                       |  |
| Typical junction capacitance                           | $C_J$ 45pF           | $V_R = 5.0V, T_J = 25^\circ C$                                    |  |
| *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             | $R_{\theta JL}$ L = 1/4" | 25°C/W Junction to Lead          |  |
| Weight                                 |                          | .011 ounces (0.34 grams) typical |  |

# MS110

Figure 1  
Typical Forward Characteristics

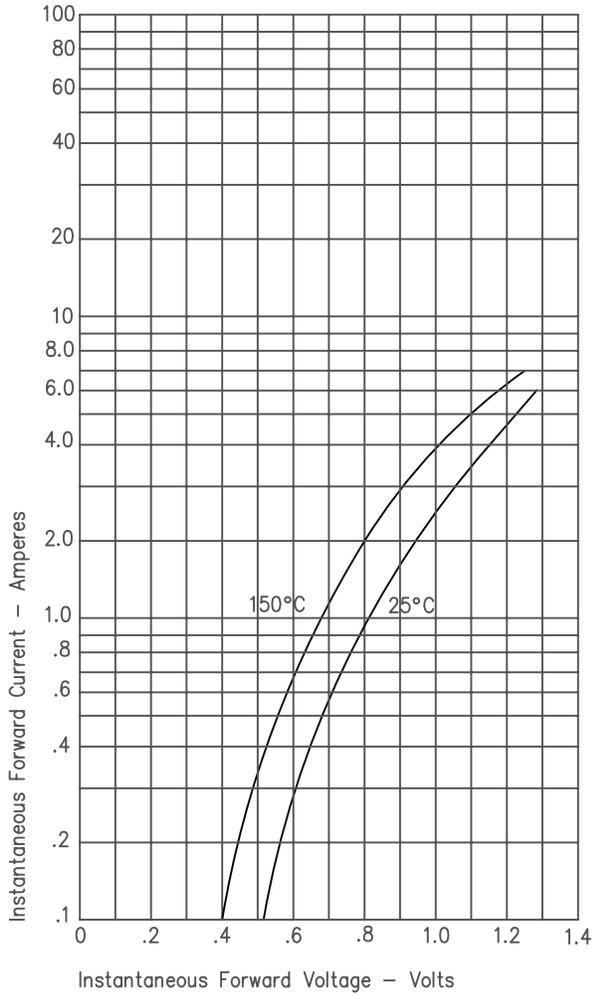


Figure 3  
Typical Junction Capacitance

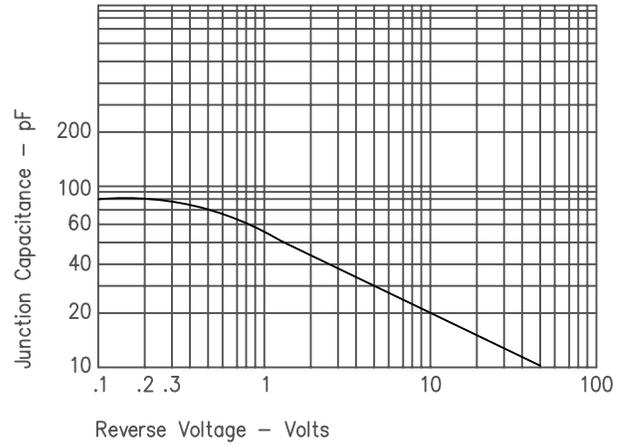


Figure 2  
Typical Reverse Characteristics

