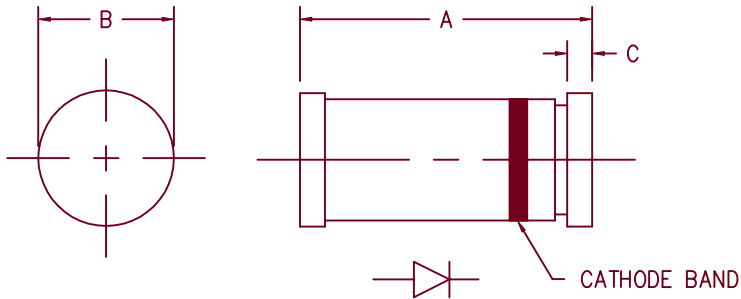


1 Amp Schottky Rectifier LSM140 — LSM150



| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| A | .189 | .205 | 4.80 | 5.20 | |
| B | .094 | .105 | 2.39 | 2.66 | Dia. |
| C | .016 | .022 | .41 | .55 | |

GLASS HERMETIC D0213AB

| Microsemi Catalog Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage | Device Marking |
|-----------------------------|------------------------------------|---------------------------------------|-------------------|
| LSM140 | 40V | 40V | L140 |
| LSM145 | 45V | 45V | L145 |
| LSM150 | 50V | 50V | L150 |

- Low Forward Voltage
- Schottky Barrier Rectifier
- Guard Ring Protection
- 150°C Junction Temperature
- VRRM 40 to 50 Volts

Electrical Characteristics

| | | |
|------------------------------|-----------------------------|--|
| Average forward current | I _{F(AV)} 1.0 Amps | T _A = 124°C, Square wave, R _{θJC} = 45°C/W |
| Maximum surge current | I _{FSM} 50 Amps | 8.3ms, half sine, T _J = 150°C |
| Max peak forward voltage | V _{FM} .39 Volts | I _{FM} = 0.1A: T _J = 25°C* |
| Max peak forward voltage | V _{FM} .58 Volts | I _{FM} = 1.0A: T _J = 25°C* |
| Max peak reverse current | I _{RM} 1.0 mA | V _{RRM} , T _J = 25°C |
| Typical junction capacitance | C _J 60pF | 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} | -65°C to 150°C |
| Operating junction temp range | T _J | -65°C to 150°C |
| Typical thermal Resistance | R _{θJC} | 45°C/W Junction to Case |
| Weight | | .0047 ounces (.012 grams) typical |

3-29-00 Rev. IR

LSM140 — LSM150

Figure 1
Maximum Forward Characteristics

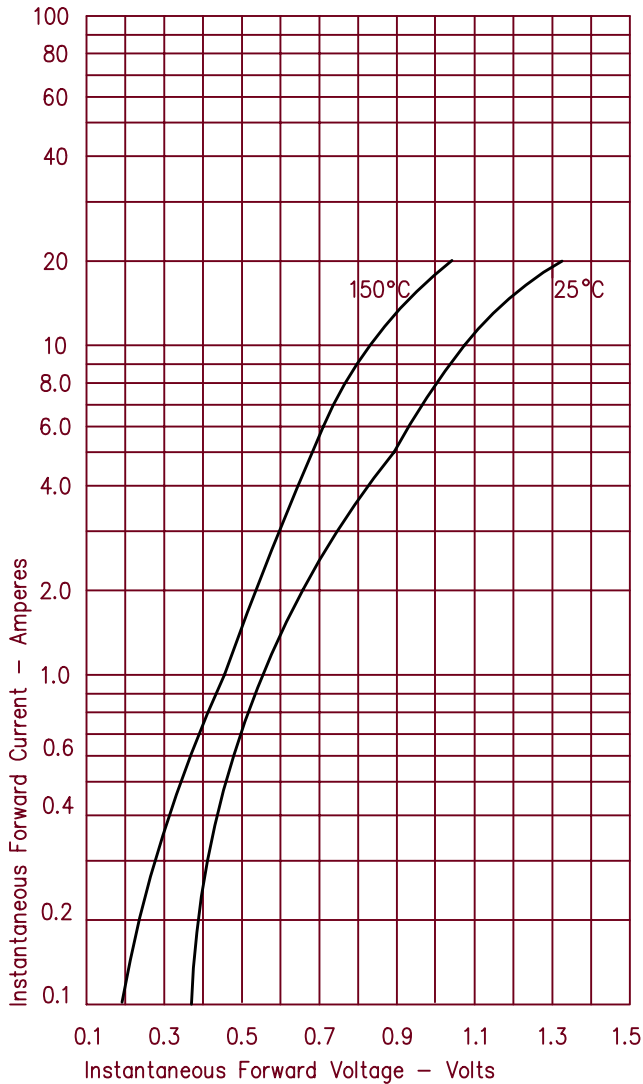


Figure 3
Typical Junction Capacitance

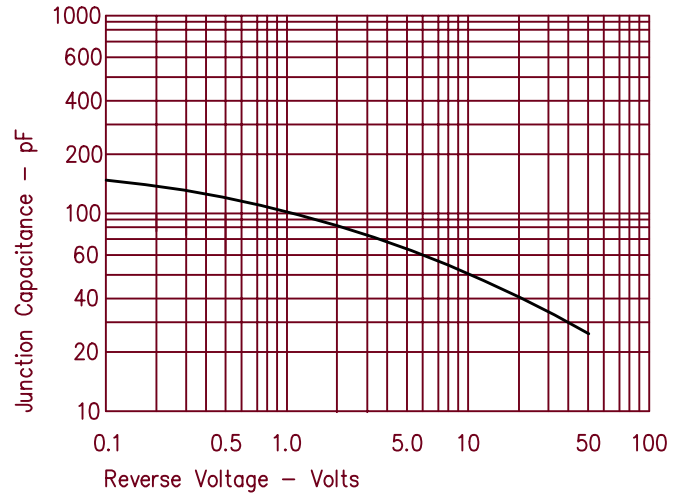


Figure 2
Typical Reverse Characteristics

