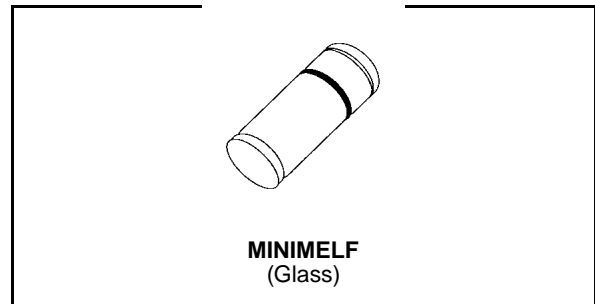


SMALL SIGNAL SCHOTTKY DIODE
DESCRIPTION

Metal to silicon junction diode featuring high breakdown, low turn-on voltage and ultrafast switching. Primarily intended for high level UHF/VHF detection and pulse application with broad dynamic range.


ABSOLUTE MAXIMUM RATINGS (limiting values)

| Symbol | Parameter | | Value | Unit |
|--------------------|--|--------------------------|---------------------------|------------------|
| V_{RRM} | Repetitive Peak Reverse Voltage | | 60 | V |
| I_F | Forward Continuous Current | $T_i = 25^\circ\text{C}$ | 15 | mA |
| I_{FSM} | Surge non Repetitive Forward Current | $t_p \leq 1\text{s}$ | 50 | mA |
| T_{stg} T_j | Storage and Junction Temperature Range | | - 65 to 200 -65 to 200 | $^\circ\text{C}$ |
| T_L | Maximum Temperature for Soldering during 15s | | 260 | $^\circ\text{C}$ |

THERMAL RESISTANCE

| Symbol | Test Conditions | Value | Unit |
|---------------|-----------------|-------|---------------------------|
| $R_{th(j-l)}$ | Junction-leads | 400 | $^\circ\text{C}/\text{W}$ |

ELECTRICAL CHARACTERISTICS
STATIC CHARACTERISTICS

| Symbol | Test Conditions | | Min. | Typ. | Max. | Unit |
|----------|------------------------------|-----------------------|------|------|------|---------------|
| V_{BR} | $T_{amb} = 25^\circ\text{C}$ | $I_R = 10\mu\text{A}$ | 60 | | | V |
| V_F^* | $T_{amb} = 25^\circ\text{C}$ | $I_F = 1\text{mA}$ | | | 0.41 | V |
| | $T_{amb} = 25^\circ\text{C}$ | $I_F = 15\text{mA}$ | | | 1 | |
| I_R^* | $T_{amb} = 25^\circ\text{C}$ | $V_R = 50\text{V}$ | | | 0.2 | μA |

DYNAMIC CHARACTERISTICS

| Symbol | Test Conditions | | | Min. | Typ. | Max. | Unit |
|--------|------------------------------|--------------------|-------------------|------|------|------|------|
| C | $T_{amb} = 25^\circ\text{C}$ | $V_R = 0\text{V}$ | $f = 1\text{MHz}$ | | | 2.2 | pF |
| τ | $T_{amb} = 25^\circ\text{C}$ | $I_F = 5\text{mA}$ | Krakauer Method | | | 100 | ps |

* Pulse test: $t_p \leq 300\mu\text{s}$ $\delta < 2\%$.

Matched batches available on request. Test conditions (forward voltage and/or capacitance) according to customer specification.

Figure 1. Forward current versus forward voltage (typical values).

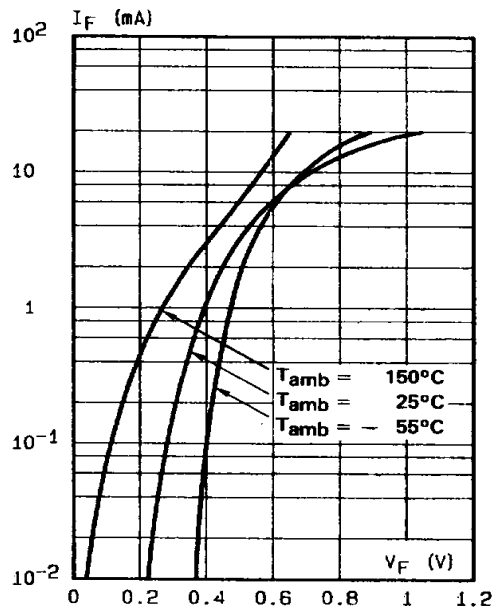


Figure 2. Capacitance C versus reverse applied voltage V_R (typical values).

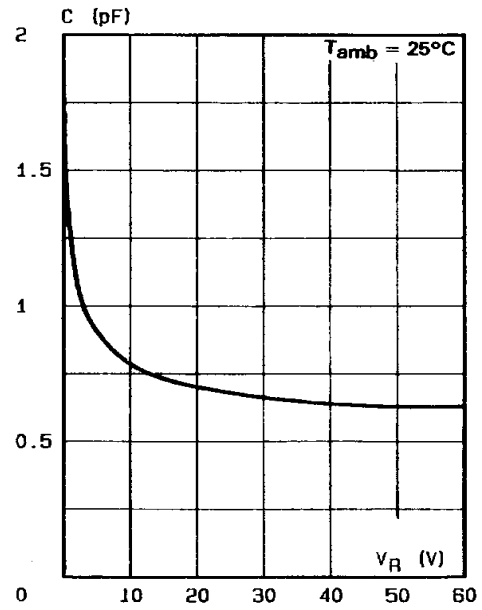


Figure 3. Reverse current versus ambient temperature.

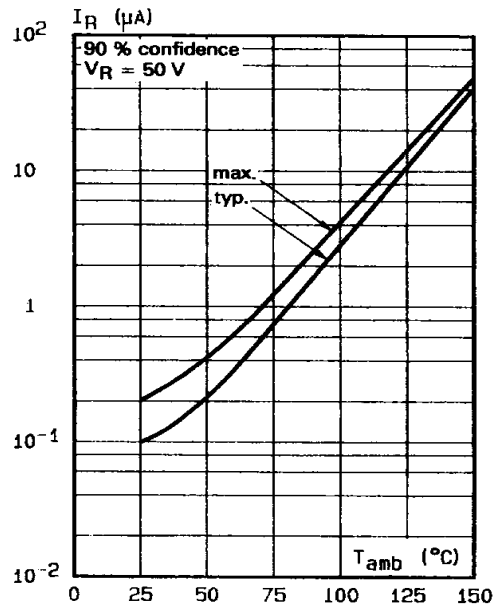
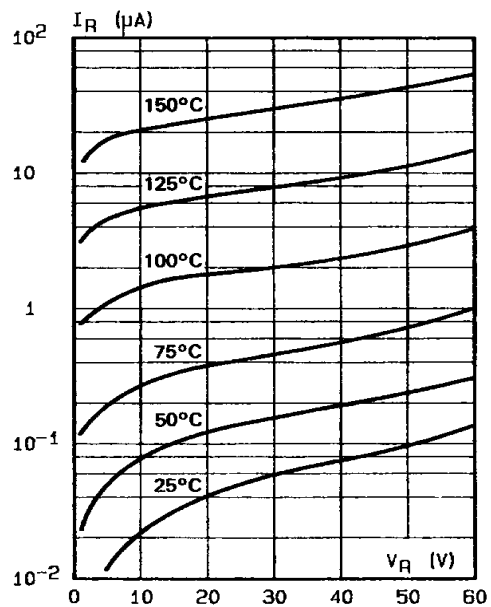
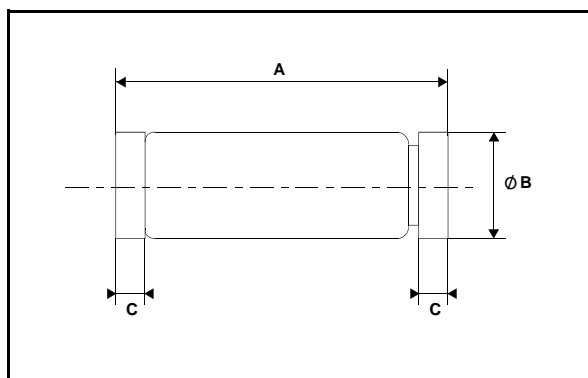


Figure 4. Reverse current versus continuous reverse voltage (typical values).



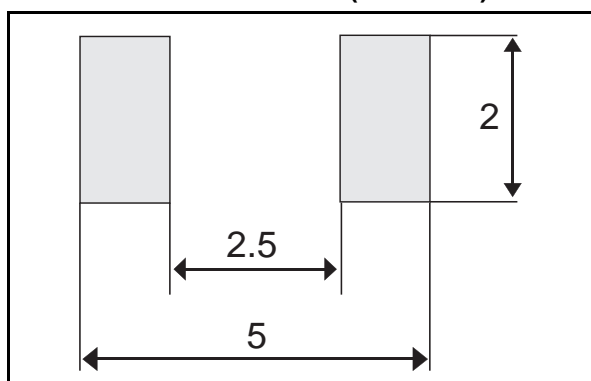
PACKAGE MECHANICAL DATA

MINIMELF Glass



| REF. | DIMENSIONS | | | | | |
|------|-------------|------|------|--------|-------|-------|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| A | 3.30 | 3.40 | 3.6 | 0.130 | 0.134 | 0.142 |
| B | 1.59 | 1.60 | 1.62 | 0.063 | 0.063 | 0.064 |
| C | 0.40 | 0.45 | 0.50 | 0.016 | 0.018 | 0.020 |
| D | | 1.50 | | | 0.059 | |

FOOT PRINT DIMENSIONS (Millimeter)



Marking: ring at cathode end.
Weight: 0.05g

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