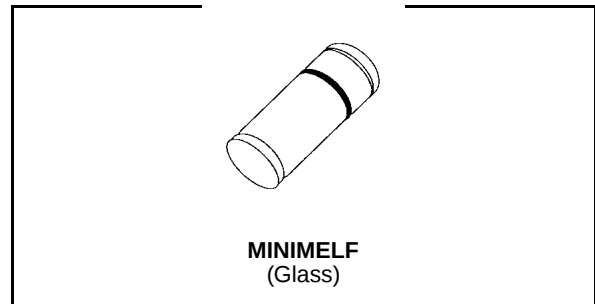


**SMALL SIGNAL SCHOTTKY DIODE****DESCRIPTION**

Metal to silicon junction diode featuring high break-down, 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               |
| $T_{stg}$<br>$T_j$ | Storage and Junction Temperature Range       |                          | - 65 to 200<br>-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   | $^\circ\text{C/W}$ |

**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  | $\mu\text{A}$ |

**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   |
| $\tau$ | $T_{amb} = 25^\circ\text{C}$ | $I_F = 5\text{mA}$ | 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).

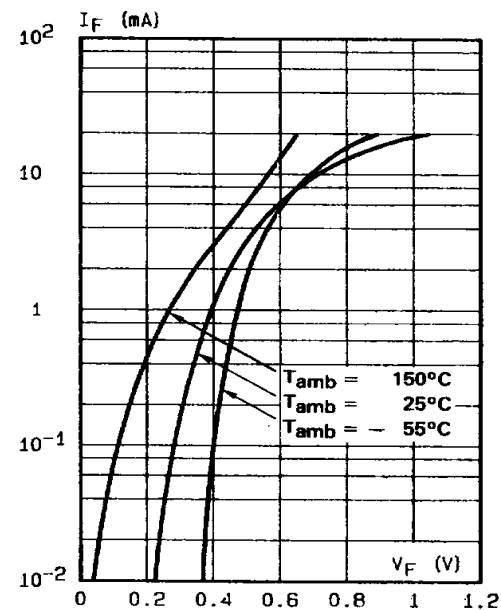


Figure 2. Capacitance  $C$  versus reverse applied voltage  $V_R$  (typical values).

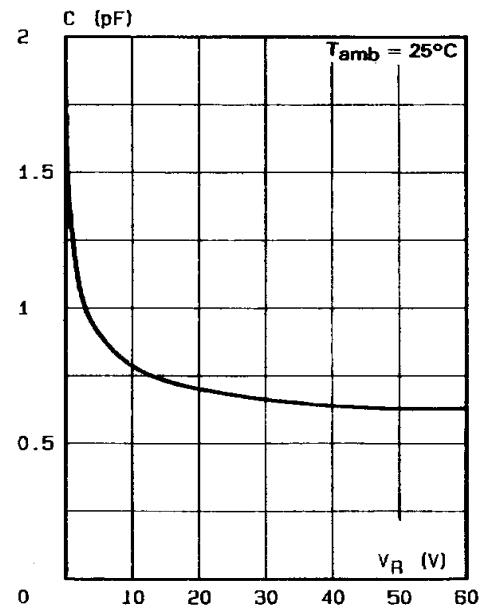


Figure 3. Reverse current versus ambient temperature.

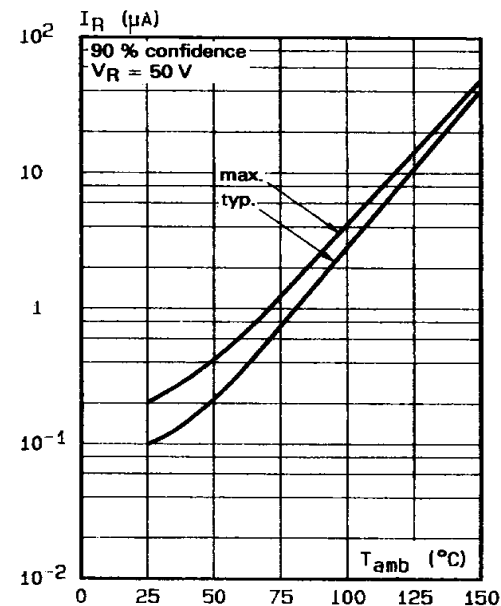
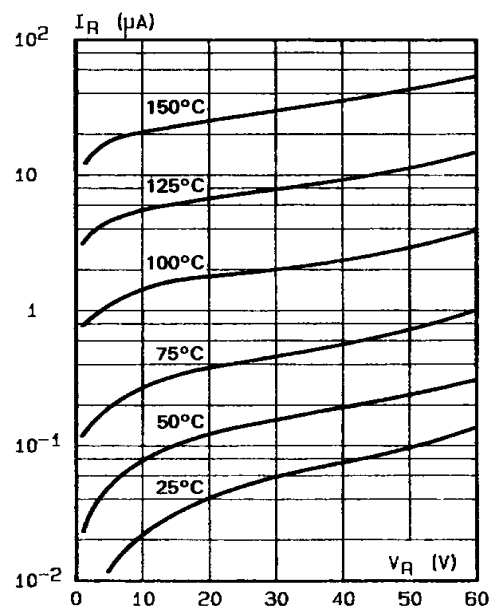
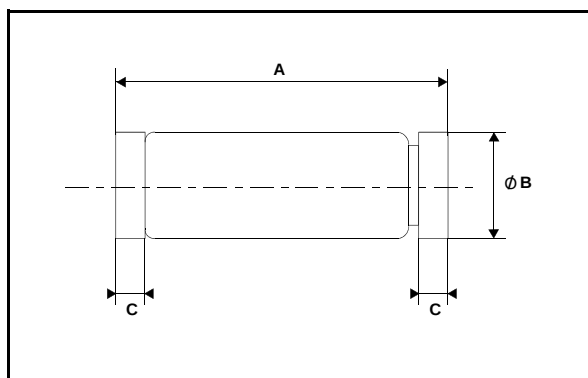


Figure 4. Reverse current versus continuous reverse voltage (typical values).



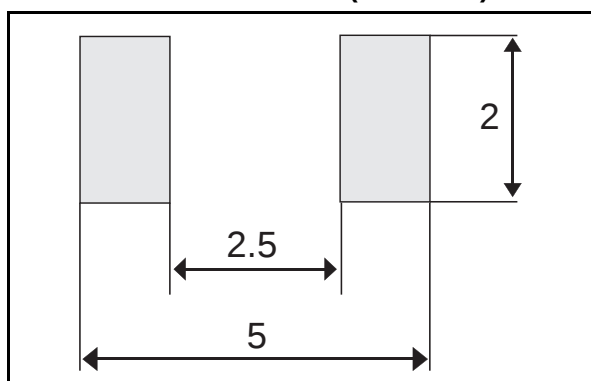
## PACKAGE MECHANICAL DATA

## 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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