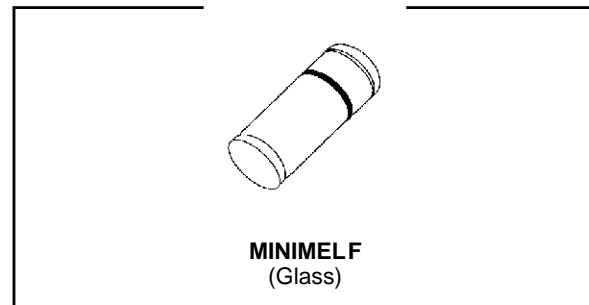


**SMALL SIGNAL SCHOTTKY DIODE**
**DESCRIPTION**

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                   | $T_i = 25\text{ }^\circ\text{C}$ | 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          |
|----------|--------------------------------------|-------------------------------|------|------|------|---------------|
| $V_{BR}$ | $T_{amb} = 25\text{ }^\circ\text{C}$ | $I_R = 10\text{ }\mu\text{A}$ | 60   |      |      | V             |
| $V_F^*$  | $T_{amb} = 25\text{ }^\circ\text{C}$ | $I_F = 1\text{ mA}$           |      |      | 0.41 | V             |
|          | $T_{amb} = 25\text{ }^\circ\text{C}$ | $I_F = 15\text{ mA}$          |      |      | 1    |               |
| $I_R^*$  | $T_{amb} = 25\text{ }^\circ\text{C}$ | $V_R = 50\text{ V}$           |      |      | 0.2  | $\mu\text{A}$ |

**DYNAMIC CHARACTERISTICS**

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

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

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).

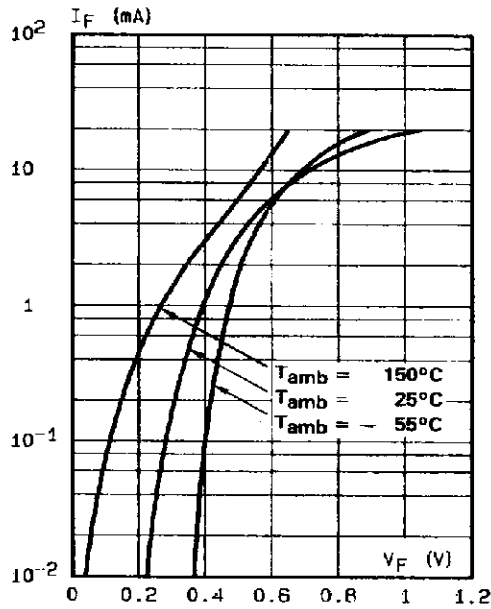


Figure 2. Capacitance C versus reverse applied voltage  $V_R$  (typical values).

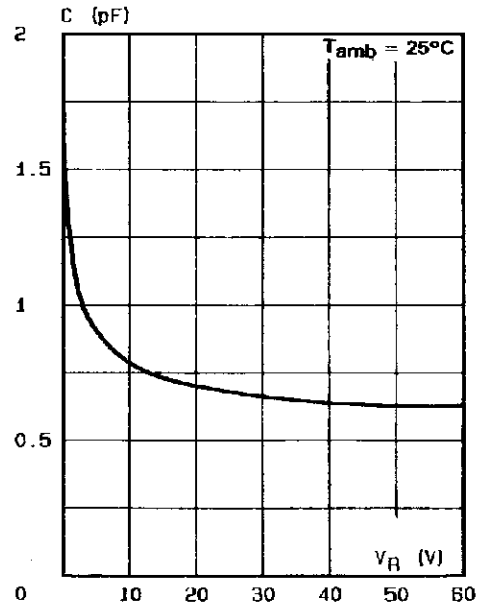


Figure 3. Reverse current versus ambient temperature.

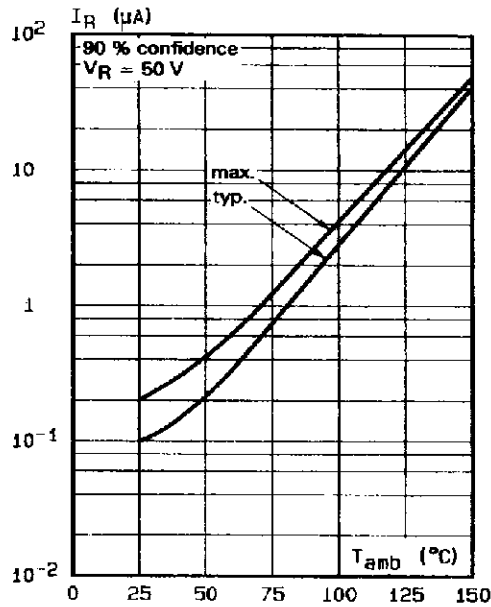
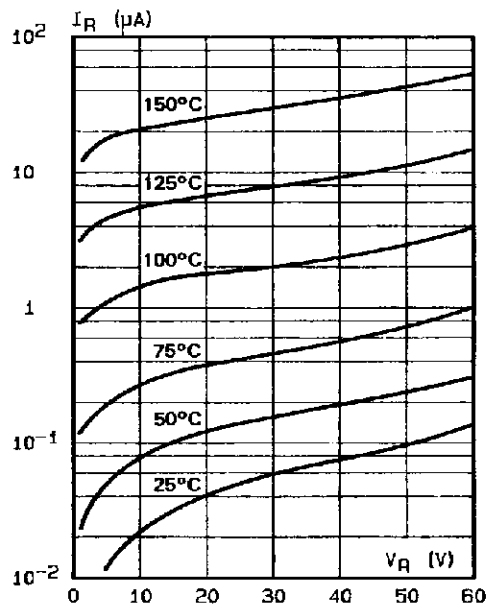


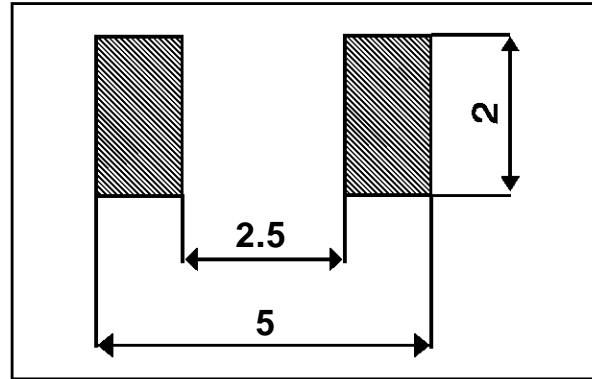
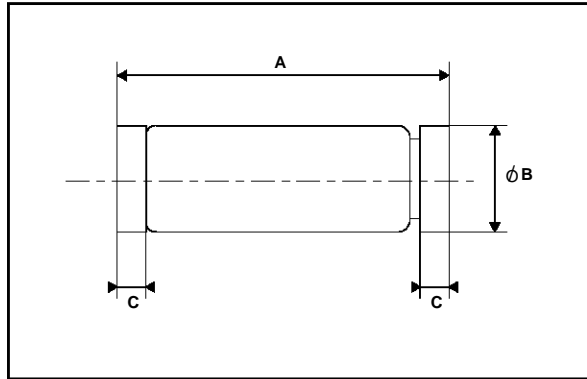
Figure 4. Reverse current versus continuous reverse voltage (typical values).



## PACKAGE MECHANICAL DATA

## FOOT PRINT DIMENSIONS (Millimeter)

MINIMELF Glass



| REF. | DIMENSIONS  |      |        |       |
|------|-------------|------|--------|-------|
|      | Millimeters |      | Inches |       |
|      | Min.        | Max. | Min.   | Max.  |
| A    | 3.3         | 3.6  | 0.130  | 0.142 |
| B    | 1.59        | 1.62 | 0.063  | 0.064 |
| C    | 0.4         | 0.5  | 0.016  | 0.020 |

Marking: ring at cathode end.  
Weight: 0.05g

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