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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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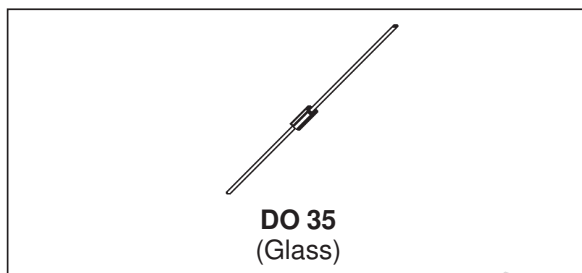
## SMALL SIGNAL SCHOTTKY DIODE

### 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.

Matched batches are available on request.



### ABSOLUTE RATINGS (limiting values)

| Symbol             | Parameter  | Value                      | Unit             |
|--------------------|--|----------------------------|------------------|
| $V_{RRM}$          | Repetitive Peak Reverse Voltage                                    | 75                         | V                |
| $I_F$              | Forward Continuous Current*<br>$T_a = 25^\circ\text{C}$            | 15                         | mA               |
| $I_{FSM}$          | Surge non Repetitive Forward Current*<br>$t_p \leq 1\text{ s}$     | 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 Lead Temperature for Soldering during 10s at 4mm from Case | 230                        | $^\circ\text{C}$ |

### THERMAL RESISTANCE

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

### ELECTRICAL CHARACTERISTICS

#### STATIC CHARACTERISTICS

| Symbol     | Test Conditions                                    | Min. | Typ. | Max. | Unit          |
|------------|--|------|------|------|---------------|
| $V_{BR}$   | $T_{amb} = 25^\circ\text{C}$ $I_R = 10\mu\text{A}$ | 70   |      |      | 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

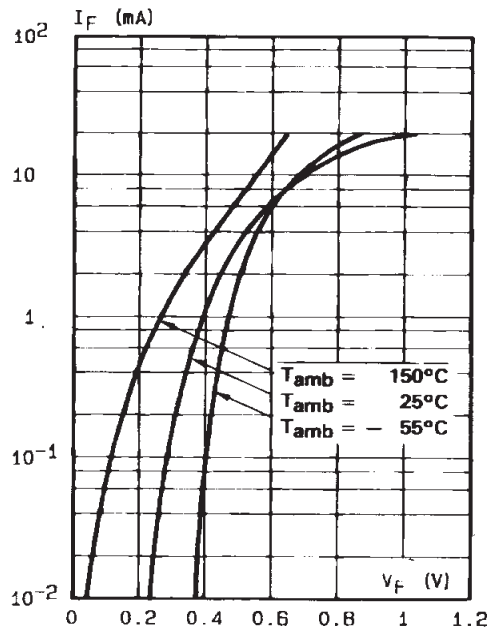
| Symbol | Test Conditions  | Min. | Typ. | Max. | Unit |
|--------|--|------|------|------|------|
| C      | $T_{amb} = 25^\circ\text{C}$ $V_R = 0\text{ V}$ $f = 1\text{ MHz}$ |      |      | 2    | pF   |
| $\tau$ | $T_{amb} = 25^\circ\text{C}$ $I_F = 5\text{ mA}$ Krakauer Method   |      |      | 100  | ps   |

\* On infinite heatsink with 4mm lead length

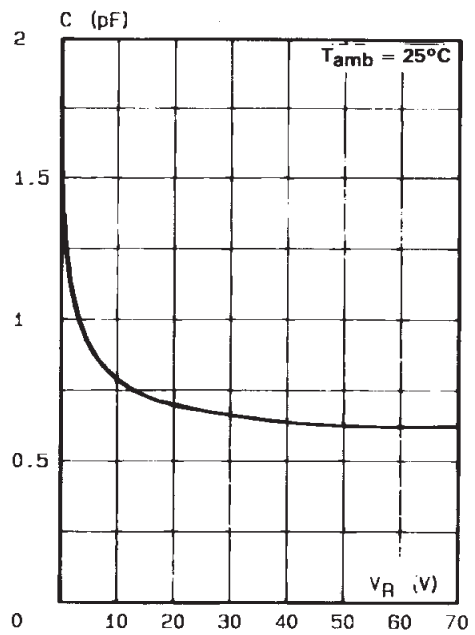
\*\* Pulse test:  $t_p @ 300\mu\text{s}$   $\delta < 2\%$ .

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

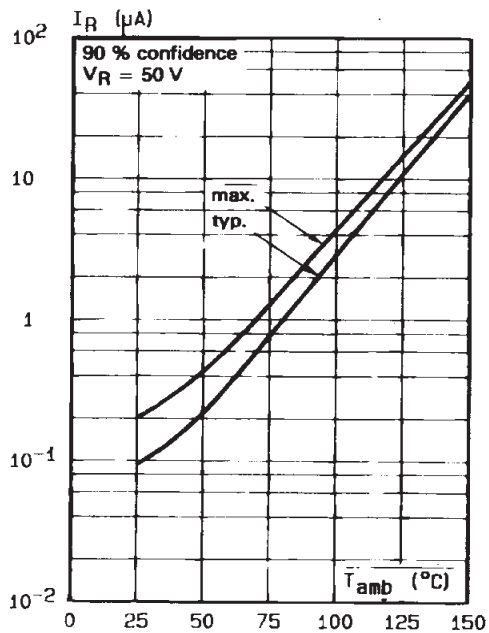
**Fig. 1:** Forward current versus forward voltage at low level (typical values).



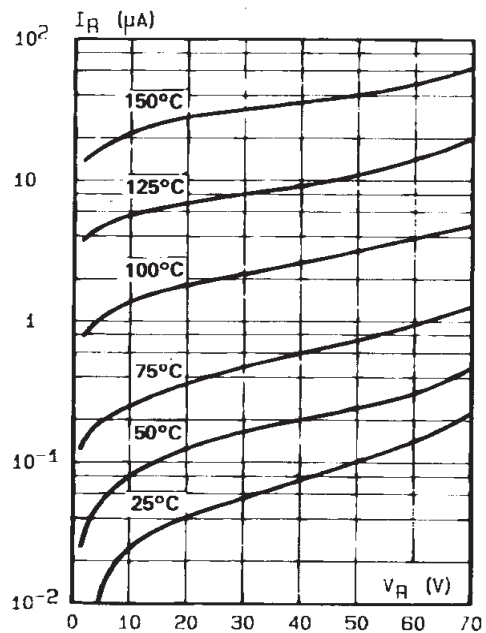
**Fig. 2:** Capacitance C versus reverse applied voltage  $V_R$  (typical values).



**Fig. 3:** Reverse current versus ambient temperature.

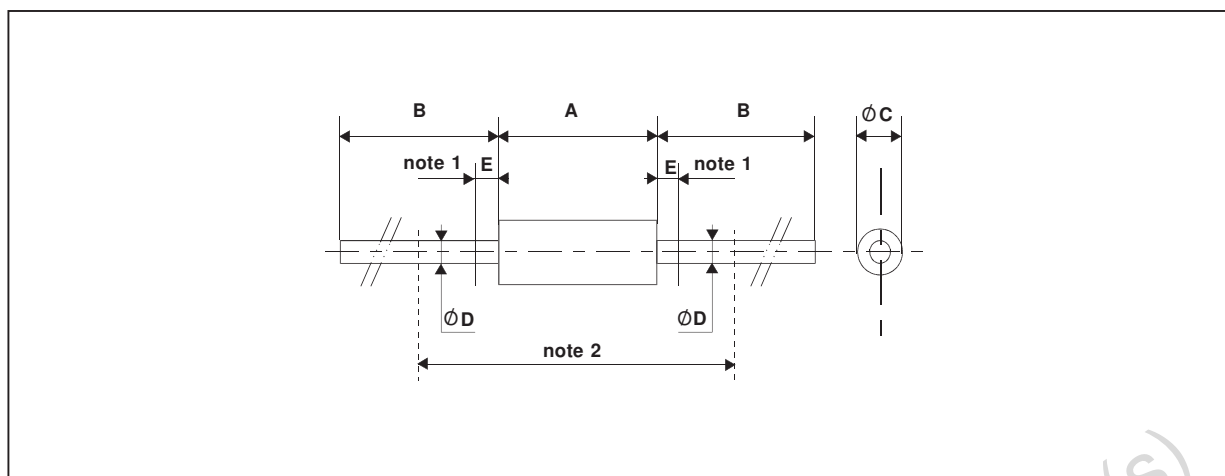


**Fig. 4:** Reverse current versus continuous reverse voltage (typical values).



Cooling method : by convection and conduction  
 Marking: clear, ring at cathode end.

**PACKAGE MECHANICAL DATA**



| REF.            | DIMENSIONS  |       |        |       | NOTES  |
|-----------------|-------------|-------|--------|-------|--|
|                 | Millimeters |       | Inches |       |  |
|                 | Min.        | Max.  | Min.   | Max.  |  |
| A               | 3.050       | 4.500 | 0.120  | 0.117 | 1 - The lead diameter $\varnothing D$ is not controlled over zone E<br>2 - The minimum axial length within which the device may be placed with its leads bent at right angles is 0.59" (15 mm) |
| B               | 12.7        |       | 0.500  |       |  |
| $\varnothing C$ | 1.530       | 2.000 | 0.060  | 0.079 |  |
| $\varnothing D$ | 0.458       | 0.558 | 0.018  | 0.022 |  |
| E               |             | 1.27  |        | 0.050 |  |

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