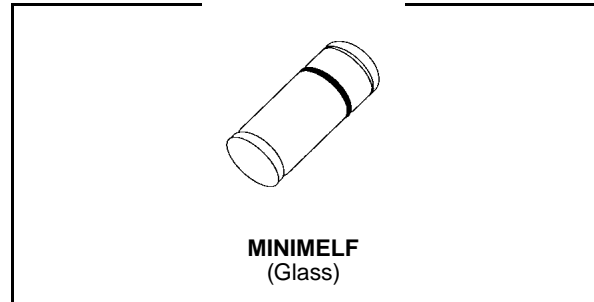




SMALL SIGNAL SCHOTTKY DIODE

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} 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	$^\circ\text{C/W}$

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	μA

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

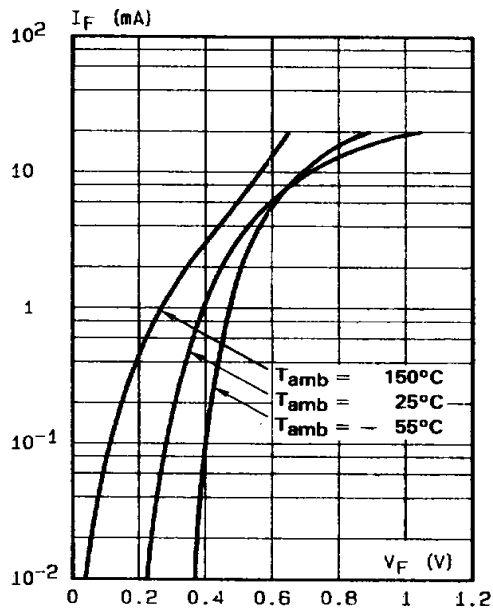


Figure 2. Capacitance C versus reverse applied voltage V_R (typical values).

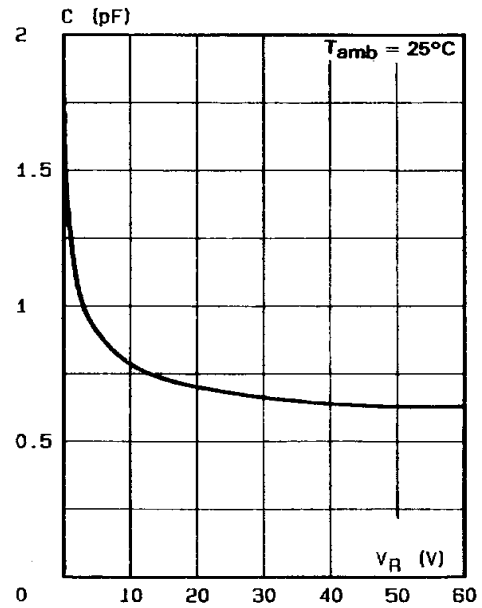


Figure 3. Reverse current versus ambient temperature.

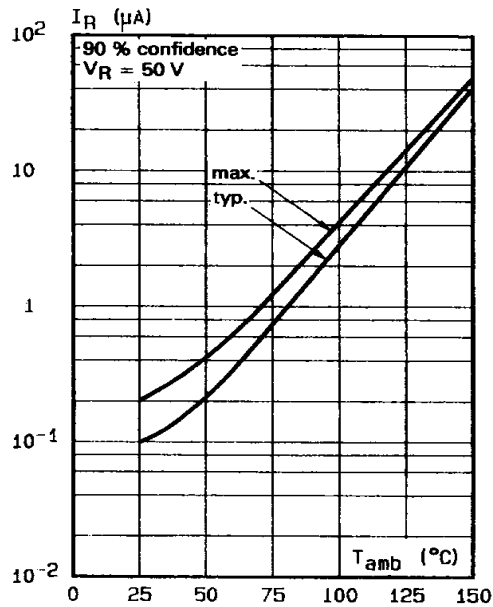
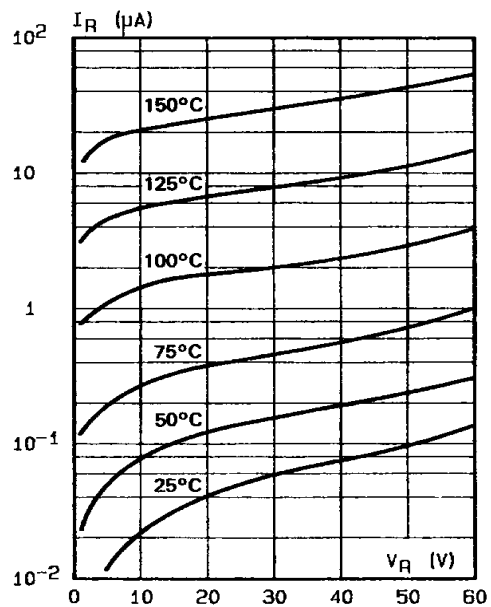
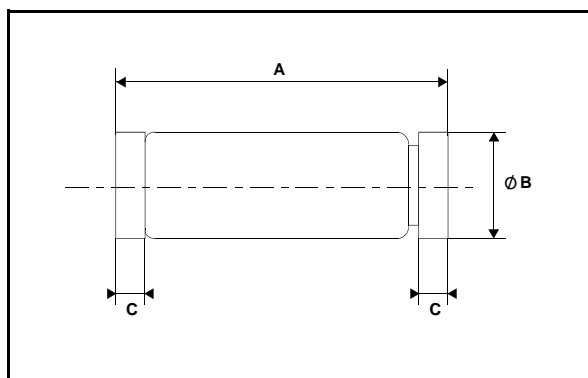


Figure 4. Reverse current versus continuous reverse voltage (typical values).



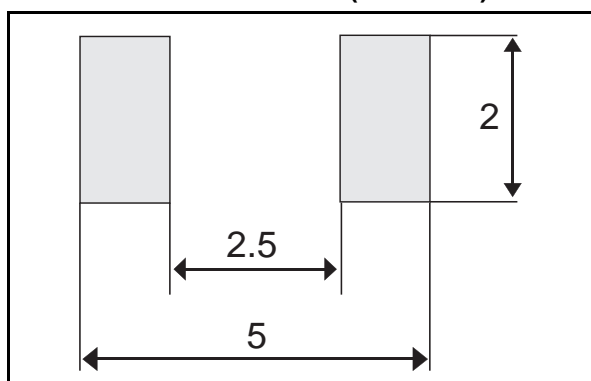
PACKAGE MECHANICAL DATA

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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