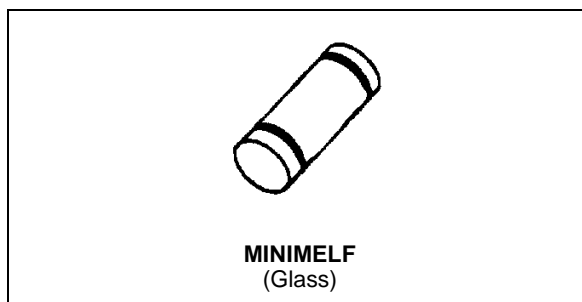


## SMALL SIGNAL SCHOTTKY DIODE

### DESCRIPTION

Metal to silicon junction diode featuring high break-down voltage, 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		20	V
$I_F$	Forward Continuous Current	$T_i = 25^\circ\text{C}$	35	mA
$P_{tot}$	Power Dissipation	$T_i = 25^\circ\text{C}$	430	mW
$T_{stg}$ $T_j$	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
$V_{BR}$	$T_{amb} = 25^\circ\text{C}$	$I_R = 10\mu\text{A}$	20			V
$V_F^*$	$T_{amb} = 25^\circ\text{C}$	$I_F = 1\text{mA}$			0.41	V
	$T_{amb} = 25^\circ\text{C}$	$I_F = 35\text{mA}$			1	
$I_R^*$	$T_{amb} = 25^\circ\text{C}$	$V_R = 15\text{V}$			0.1	$\mu\text{A}$

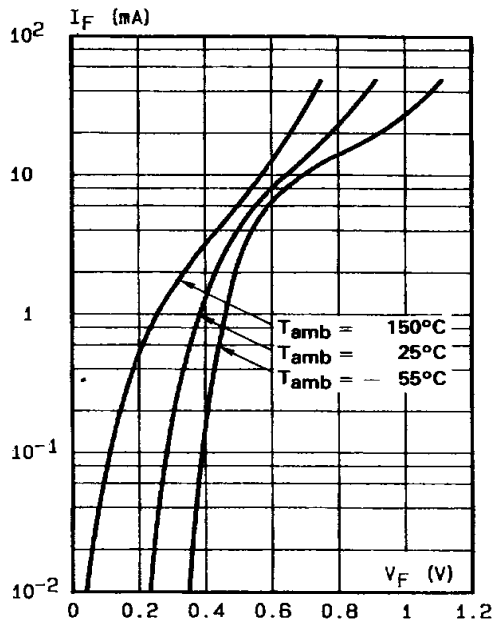
#### DYNAMIC CHARACTERISTICS

Symbol	Test Conditions			Min.	Typ.	Max.	Unit
C	$T_{amb} = 25^\circ\text{C}$	$V_R = 0\text{V}$	$f = 1\text{MHz}$			1.2	pF
$\tau$	$T_{amb} = 25^\circ\text{C}$	$I_F = 5\text{mA}$	Krakauer Method			100	ps

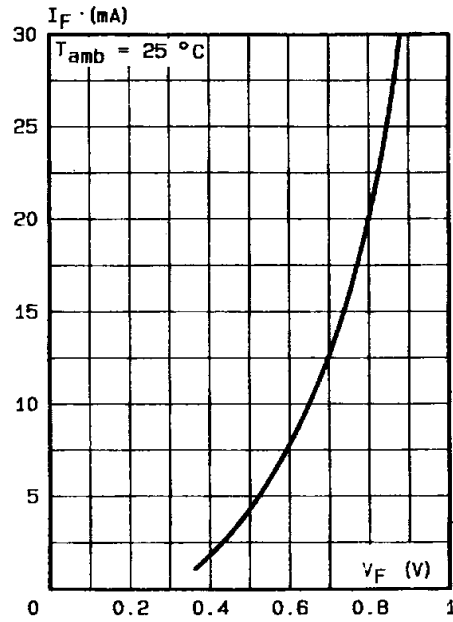
\* Pulse test:  $t_p \leq 300\mu\text{s}$   $\delta < 2\%$ .

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

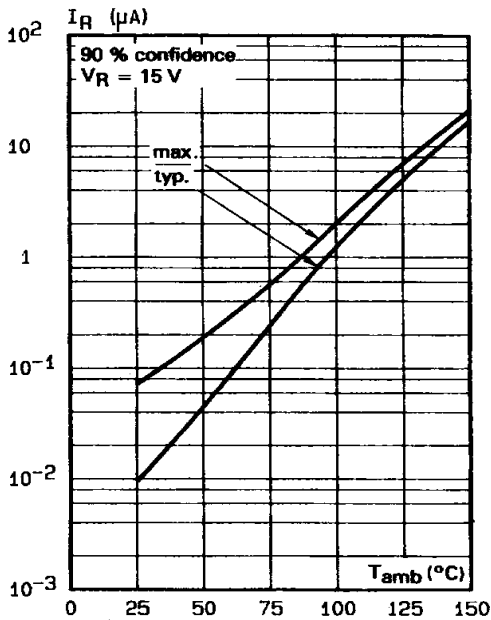
**Fig.1** : Forward current versus forward voltage at different temperatures (typical values)



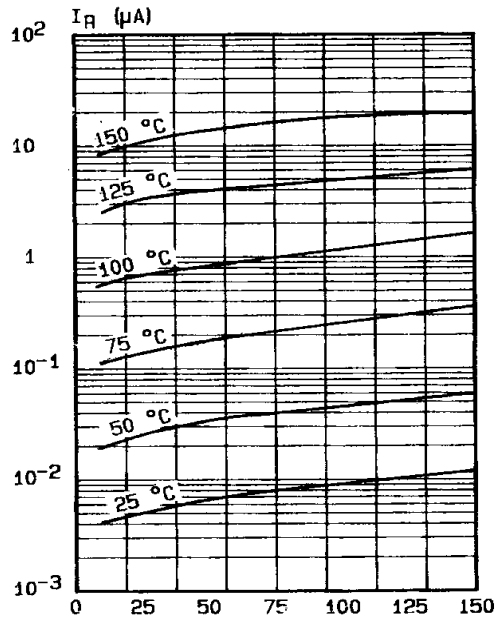
**Fig.2** : Forward current versus forward voltage (typical values).



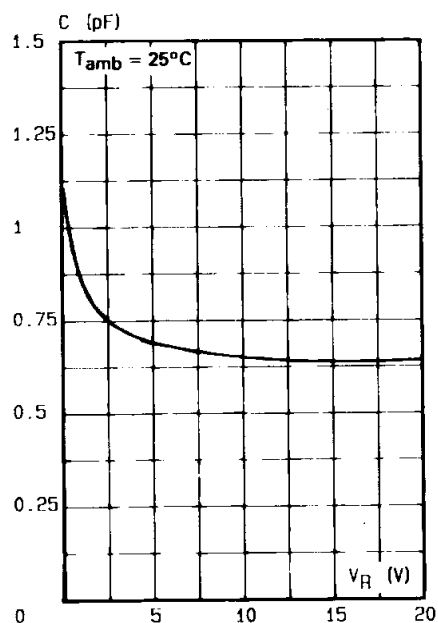
**Fig.3** : Reverse current versus ambient temperature.



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

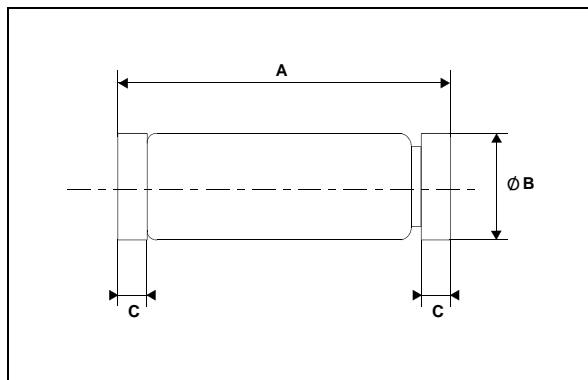


**Fig.5** : Capacitance C versus reverse applied voltage  $V_R$  (typical values).

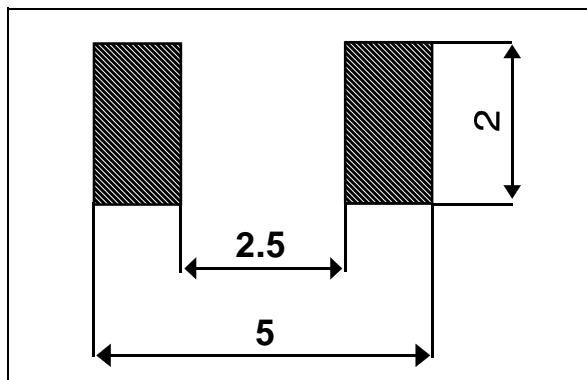


#### PACKAGE MECHANICAL DATA

MINIMELF Glass



#### FOOT PRINT DIMENSIONS (Millimeter)



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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