

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.



MINIMELF
(Glass)

ABSOLUTE MAXIMUM RATINGS (limiting values)

Symbol	Parameter		Value	Unit
V_{RRM}	Repetitive Peak Reverse Voltage		70	V
I_F	Forward Continuous Current	$T_i = 25^\circ\text{C}$	15	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	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS

STATIC CHARACTERISTICS

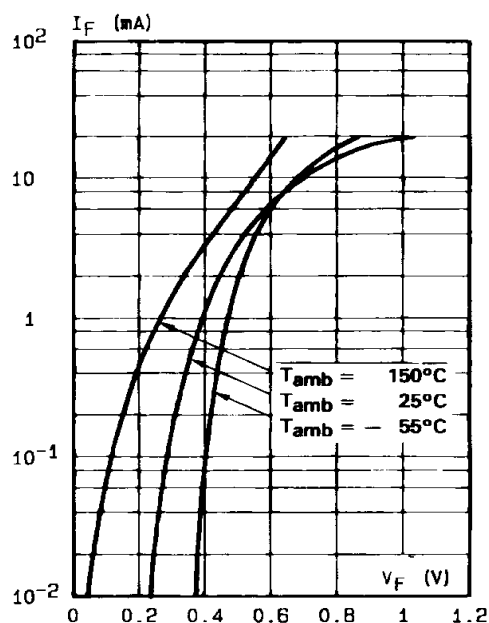
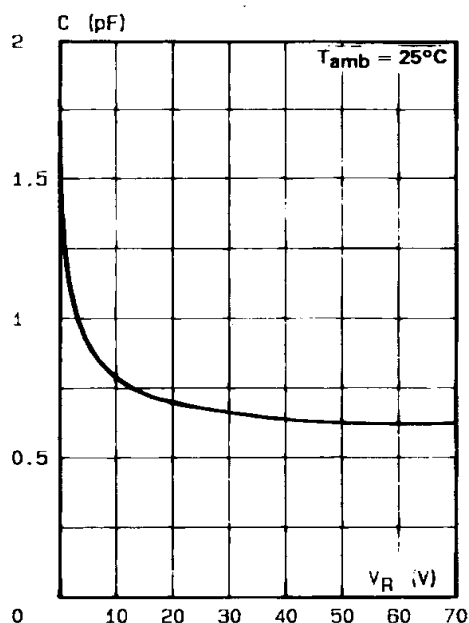
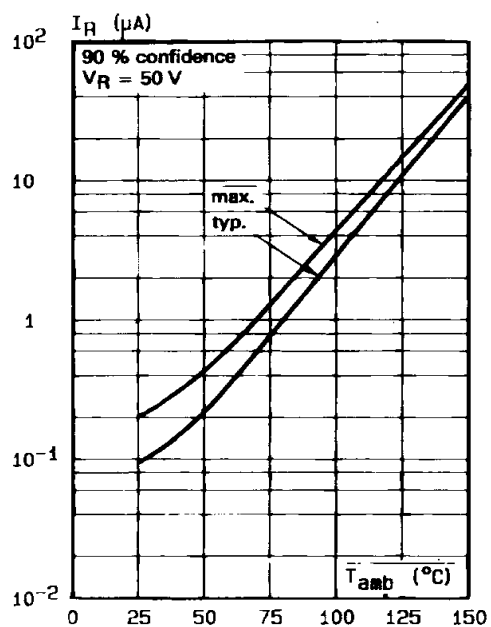
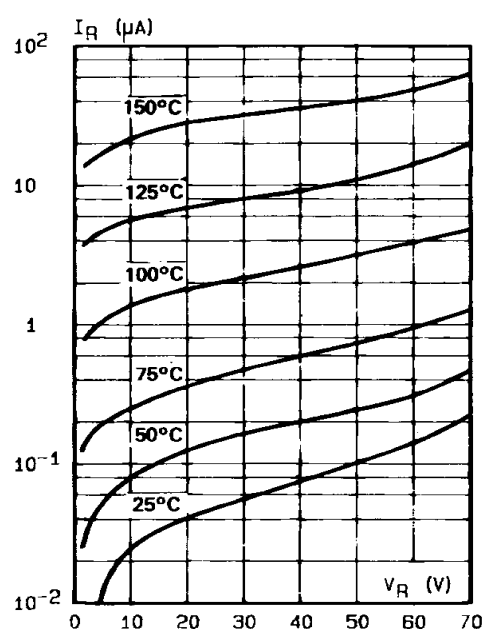
Symbol	Test Conditions		Min.	Typ.	Max.	Unit
V_{BR}	$T_{amb} = 25^\circ\text{C}$	$I_R = 10\mu\text{A}$	70			V
V_F^*	$T_{amb} = 25^\circ\text{C}$	$I_F = 1\text{mA}$			0.41	V
	$T_{amb} = 25^\circ\text{C}$	$I_F = 15\text{mA}$			1	
I_R^*	$T_{amb} = 25^\circ\text{C}$	$V_R = 50\text{V}$			0.2	μA

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
τ	$T_{amb} = 25^\circ\text{C}$	$I_F = 5\text{mA}$	Krakauer Method			100	ps

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

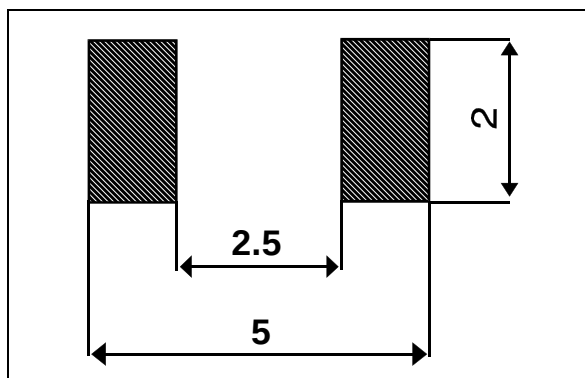
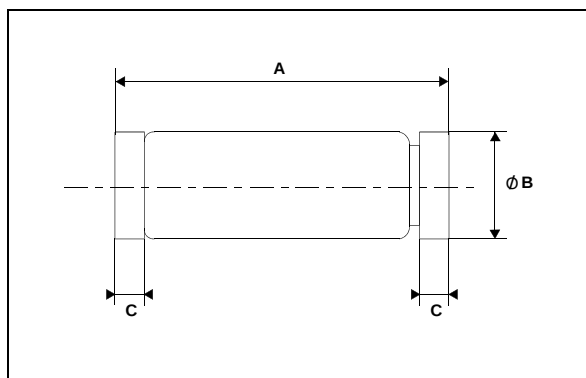
Matched batches available on request. Test conditions (forward voltage and/or capacitance) according to customer specification.

Fig.1 : Forward current versus forward voltage at 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).

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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