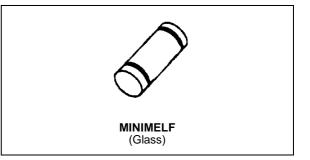


# TMMBAR 28

# SMALL SIGNAL SCHOTTKY DIODE

#### DESCRIPTION

Metal to silicon junction diode featuring high breakdown, low turn-on voltage and ultrafast switching. Primarly intended for high level UHF/VHF detection and pulse application with broad dynamic range. Matched batches are available on request.



#### **ABSOLUTE MAXIMUM RATINGS** (limiting values)

Symbol	Parameter	Value	Unit
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage	70	V
IF	Forward Continuous Current	15	mA
I <sub>FSM</sub>	Surge non Repetitive Forward Current	50	mA
T <sub>stg</sub> Tj	Storage and Junction Temperature Range	- 65 to 200 - 65 to 200	°C
ΤL	Maximum Temperature for Soldering during 1	260	°C

## THERMAL RESISTANCE

	Symbol	Test Conditions	Value	Unit
I	R <sub>th(j-l)</sub>	Junction-leads	400	°C/W

## ELECTRICAL CHARACTERISTICS

#### STATIC CHARACTERISTICS

Symbol	Test Conditions			Тур.	Max.	Unit
V <sub>BR</sub>	$T_{amb} = 25^{\circ}C$ $I_R = 10^{\circ}$	ϽμΑ	70			V
V <sub>F</sub> *	$T_{amb} = 25^{\circ}C$ $I_F = 1I_{F}$	nA			0.41	V
	$T_{amb} = 25^{\circ}C$ $I_F = 15^{\circ}C$	ōmA			1	
I <sub>R</sub> *	$T_{amb} = 25^{\circ}C$ $V_R = 5^{\circ}C$	50V			0.2	μA

#### DYNAMIC CHARACTERISTICS

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

\* Pulse test:  $t_p \le 300 \mu s \ \delta < 2\%$ .

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

(mA)  $\mathbf{I}_{\mathsf{F}}$ 10<sup>2</sup> 10 1 150°C T<sub>amb</sub> = Tamb = 25°C 55°C T<sub>amb</sub> = -10-1 ٧<sub>F</sub> (V) 10-2 0.2 0 0.4 0.6 0.8 1 1.2

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

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

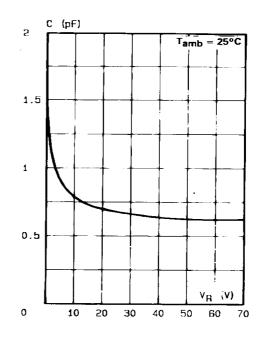
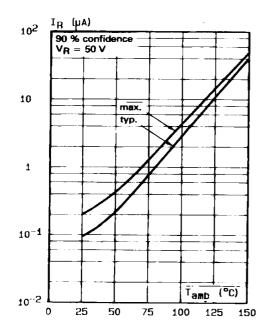
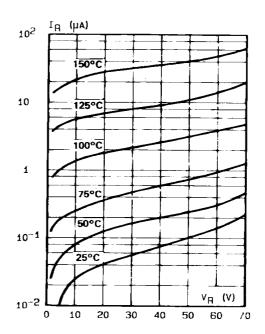


Fig.3 : Reverse current versus ambient temperature.



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

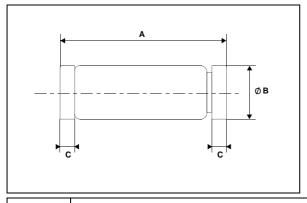




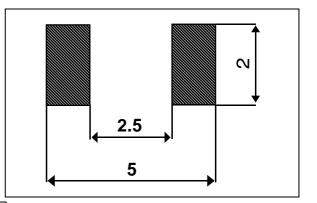
# PACKAGE MECHANICAL DATA

#### FOOT PRINT DIMENSIONS (Millimeter)

#### MINIMELF Glass



	DIMENSIONS					
REF.	Millimeters		Inches			
	Min.	Max.	Min.	Max.		
А	3.3	3.6	0.130	0.142		
В	1.59	1.62	0.063	0.064		
С	0.4	0.5	0.016	0.020		



Marking: ring at cathode end. Weight: 0.05g

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