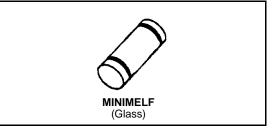


TMMBAT 41

SMALL SIGNAL SCHOTTKY DIODE

DESCRIPTION

General purpose metal to silicon diode featuring very low turn-on voltage and fast switching. This device has integrated protection against excessive voltage such as electrostatic discharges.



ABSOLUTE RATINGS (limiting values)

Symbol	Parameter	Value	Unit	
V _{RRM}	Repetitive Peak Reverse Voltage	100	V	
١ _F	Forward Continuous Current	100	mA	
I _{FRM}	$\begin{array}{ll} \mbox{Repetitive Peak Forward Current} & t_p \leq 1s \\ \delta \leq 0.5 \end{array}$		350	mA
I _{FSM}	Surge non Repetitive Forward Current	750	mA	
P _{tot}	Power Dissipation	100	mW	
T _{stg} Tj	Storage and Junction Temperature Range	- 65 to + 150 - 65 to + 125	°C ℃	
TL	Maximum Temperature for Soldering during	260	°C	

THERMAL RESISTANCE

Symbol	Test Conditions	Value	Unit
R _{th(j-l)}	Junction-leads	300	°C/W

ELECTRICAL CHARACTERISTICS

STATIC CHARACTERISTICS

Symbol	Test Conditions	Min.	Тур.	Max.	Unit	
V _{BR}	$T_j = 25^{\circ}C$ $I_R = 100\mu A$		100			V
V _F *	$T_j = 25^{\circ}C$ $I_F = 1mA$	I _F = 1mA			0.45	V
	$T_j = 25^{\circ}C$ $I_F = 200mA$				1	
I _R *	$T_j = 25^{\circ}C$	V _R = 50V			0.1	μA
	$T_j = 100^{\circ}C$				20	

DYNAMIC CHARACTERISTICS

Symbol	Test Conditions		Тур.	Max.	Unit
С	$T_j = 25^{\circ}C$ $V_R = 1V$ $f = 1MHz$		2		pF

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

August 1999 Ed: 1A

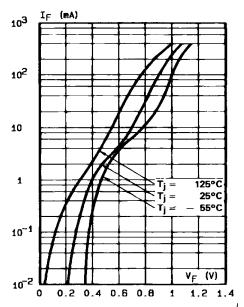


Figure 1. Forward current versus forward voltage at different temperatures (typical values).

Figure 2. Forward current versus forward voltage (typical values).

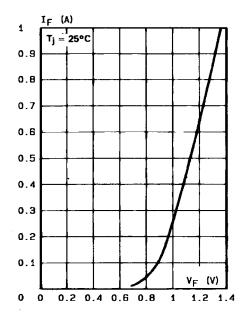


Figure 3. Reverse current versus junction temperature.

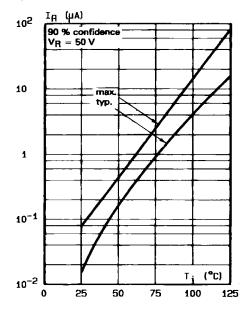
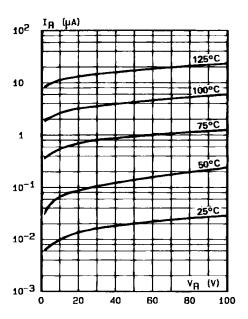


Figure 4. Reverse current versus continuous reverse voltage (typical values).



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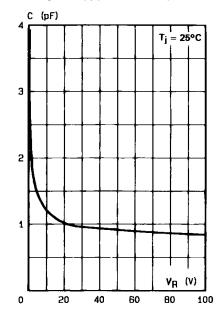
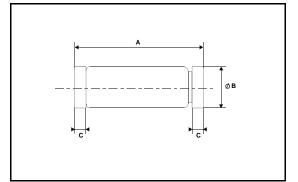


Figure 5. Capacitance C versus reverse applied voltage V_{R} (typical values).



PACKAGE MECHANICAL DATA

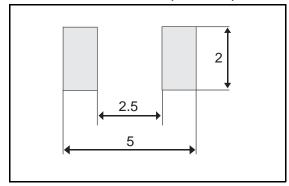
MINIMELF Glass



			DIMEN	SIONS			
REF.	Millimeters			Inches			
	Min.	Тур.	Max.	Min.	Тур.	Max.	
А	3.30	3.40	3.6	0.130	0.134	0.142	
В	1.59	1.60	1.62	0.063	0.063	0.064	
С	0.40	0.45	0.50	0.016	0.018	0.020	
D		1.50			0.059		

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FOOT PRINT DIMENSIONS (Millimeter)



Marking: ring at cathode end. Weight: 0.05g

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