

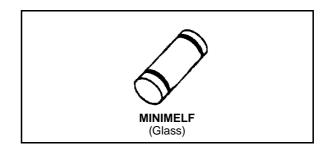
TMMBAT 41

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	epetitive Peak Reverse Voltage		
I _F	Forward Continuous Current	T _i = 25 °C	100	mA
I _{FRM}	Repetitive Peak Forward Current	$t_p \le 1s$ $\delta \le 0.5$	350	mA
I _{FSM}	Surge non Repetitive Forward Current	t _p = 10ms	750	mA
P _{tot}	Power Dissipation	T _i = 95 °C	100	mW
T _{stg} T _j	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°C	$I_R = 100 \mu A$		100			V
V _F *	T _j = 25°C	$I_F = 1mA$			0.4	0.45	٧
	T _j = 25°C	I _F = 200mA				1	
I _R *	T _j = 25°C		V _R = 50V			0.1	μΑ
	T _j = 100°C					20	

DYNAMIC CHARACTERISTICS

Symbol	Test Conditions			Min.	Тур.	Max.	Unit
С	T _j = 25°C	$V_R = 1V$	f = 1MHz		2		pF

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

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

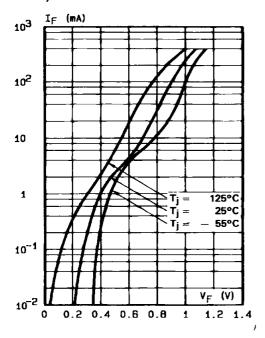


Figure 2. Forward current versus forward voltage (typical values).

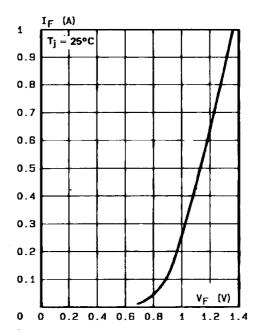


Figure 3. Reverse current versus junction temperature.

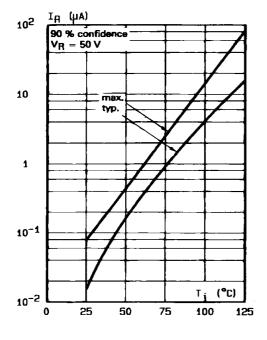
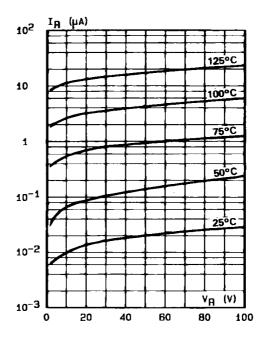


Figure 4. Reverse current versus continuous reverse voltage (typical values).



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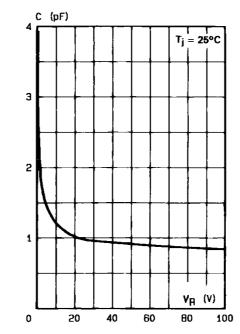
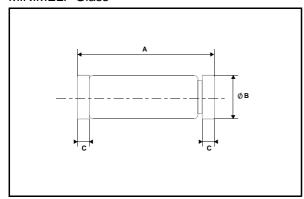


Figure 5. Capacitance C versus reverse applied voltage $V_{\mbox{\scriptsize R}}$ (typical values).

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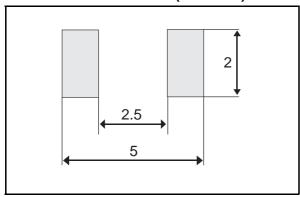
PACKAGE MECHANICAL DATA

MINIMELF Glass



	DIMENSIONS							
REF.	Millimeters			Inches				
	Min.	Тур.	Max.	Min.	Тур.	Max.		
Α	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			

FOOT PRINT DIMENSIONS (Millimeter)



Marking: ring at cathode end. Weight: 0.05g

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