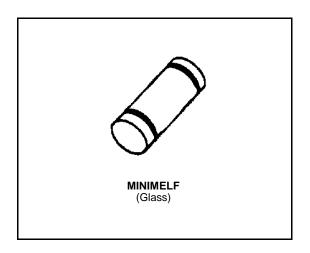


TMMBAT 46

SMALL SIGNAL SCHOTTKY DIODE



DESCRIPTION

General purpose, metal to silicon diode featuring high breakdown voltage low turn-on voltage.

ABSOLUTE RATINGS (limiting values)

Symbol	Parameter	Value	Unit	
V_{RRM}	Repetitive Peak Reverse Voltage	100	V	
l _F	Forward Continuous Current T _I = 25 °C		150	mA
I _{FRM}	Repetitive Peak Fordware Current	itive Peak Fordware Current $ \begin{array}{l} t_p \leq \text{1s} \\ \delta \leq 0.5 \end{array} $		mA
I _{FSM}	Surge non Repetitive Forward Current $t_p = 10 ms$		750	mA
P _{tot}	Power Dissipation T _I = 80 °C		150	mW
$T_{stg} \ T_{j}$	Storage and Junction Temperature Range		- 65 to + 150 - 65 to + 125	°C °C
TL	Maximum Temperature for Soldering during 15	260	°C	

THERMAL RESISTANCE

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

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ELECTRICAL CHARACTERISTICS

STATIC CHARACTERISTICS

Symbol	Test Conditions			Тур.	Max.	Unit
V_{BR}	T _j = 25°C	$I_R = 100 \mu A$	100			V
V _F *	$T_j = 25^{\circ}C$	$I_F = 0.1 \text{mA}$			0.25	V
	$T_j = 25^{\circ}C$	$I_F = 10mA$			0.45	
	$T_j = 25^{\circ}C$	$I_F = 250 \text{mA}$			1	
I _R *	$T_j = 25^{\circ}C$	V _R = 1.5V			0.5	μΑ
	$T_j = 60^{\circ}C$				5	
	T _j = 25°C	V _R = 10V			0.8	
	$T_j = 60^{\circ}C$				7.5	
	$T_j = 25^{\circ}C$	V _R = 50V			2	
	$T_j = 60^{\circ}C$				15	
	$T_j = 25^{\circ}C$	V _R = 75V			5	
	$T_j = 60^{\circ}C$				20	

DYNAMIC CHARACTERISTICS

Symbol	Test Conditions			Min.	Тур.	Max.	Unit
С	T _j = 25°C	$V_R = 0V$	f = 1MHz		10		pF
	T _j = 25°C	$V_R = 1V$			6		

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

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

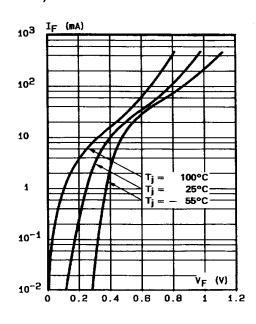
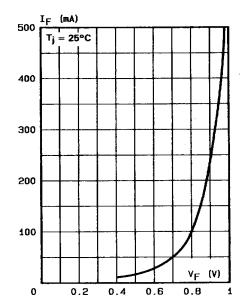


Figure 2. Forward current versus forward voltage (typical values).



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Figure 3. Reverse current versus junction temperature (typical values).

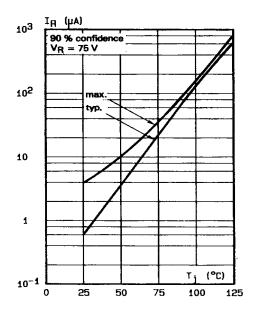


Figure 4. Reverse current versus continuous reverse voltage.

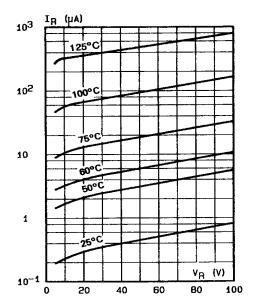
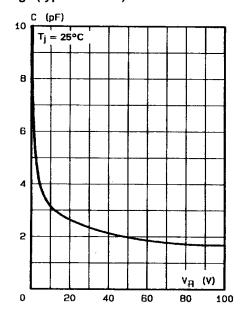


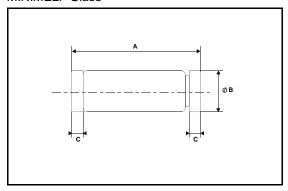
Figure 5. Forward current versus forward voltage (typical values).



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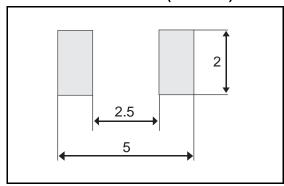
PACKAGE MECHANICAL DATA

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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