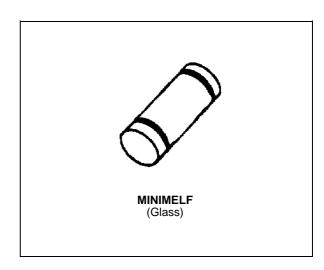


TMMBAT 46

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	150	mA	
I _{FRM}	$\begin{array}{ll} \text{Repetitive Peak Fordware Current} & & t_p \leq 1s \\ \delta \leq 0.5 & & \end{array}$		350	mA
I _{FSM}	Surge non Repetitive Forward Current	750	mA	
P _{tot}	Power Dissipation	150	mW	
T _{stg} T _j	Storage and Junction Temperature Range	- 65 to + 150 - 65 to + 125	သိ လ	
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°C	$I_F = 0.1 \text{mA}$			0.25	V
	T _j = 25°C	$I_F = 10mA$			0.45	
	T _j = 25°C	$I_F = 250 \text{mA}$			1	
I _R *	T _j = 25°C	V _R = 1.5V			0.5	μΑ
	T _j = 60°C				5	
	T _j = 25°C	V _R = 10V			0.8	
	T _j = 60°C				7.5	
	T _j = 25°C	V _R = 50V			2	
	$T_j = 60$ °C				15	
	T _j = 25°C	V _R = 75V			5	
	T _j = 60°C				20	

DYNAMIC CHARACTERISTICS

Symbol		Test Conditions			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).

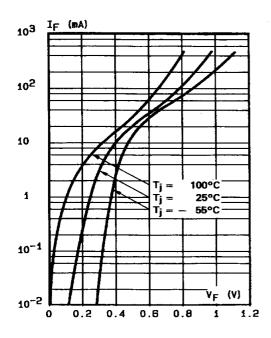


Figure 2. Forward current versus forward voltage (typical values).

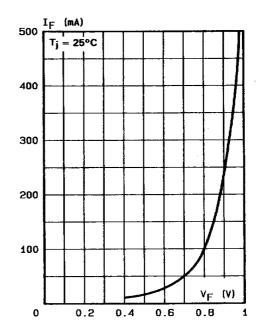


Figure 3. Reverse current versus junction temperature (typical values).

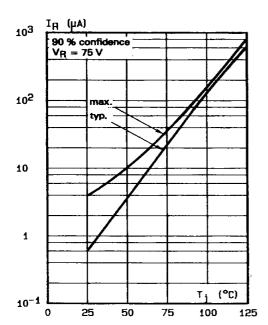


Figure 4. Reverse current versus continuous reverse voltage.

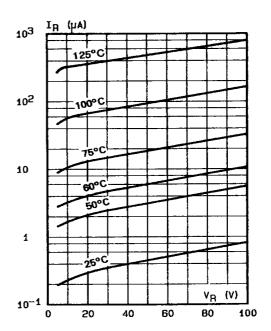
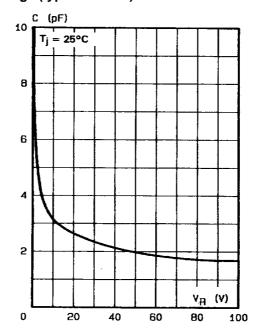


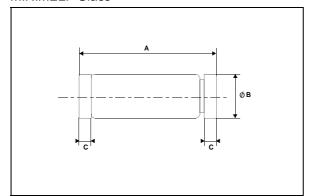
Figure 5. Forward current versus forward voltage (typical values).

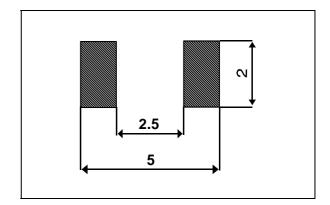


PACKAGE MECHANICAL DATA

FOOT PRINT DIMENSIONS (Millimeter)

MINIMELF Glass





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