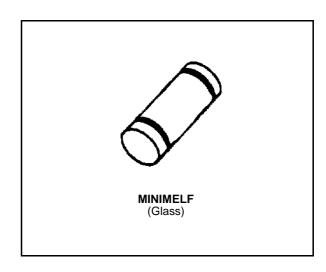


TMMBAT 46

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	$\begin{array}{l} t_p \leq 1s \\ \delta \leq 0.5 \end{array}$	350	mA
I _{FSM}	Surge non Repetitive Forward Current	t _p = 10ms	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
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 Condit	tions	Min.	Тур.	Max.	Unit
V_{BR}	T _j = 25°C	$I_R = 100 \mu A$	100			V
V _F *	T _j = 25°C	$I_F = 0.1 \text{mA}$			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			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).

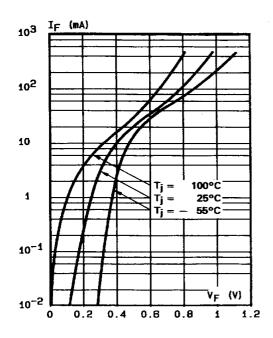
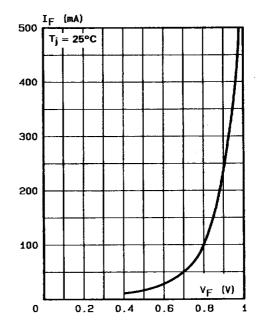


Figure 2. Forward current versus forward voltage (typical values).



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

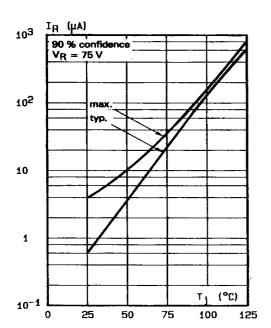


Figure 4. Reverse current versus continuous reverse voltage.

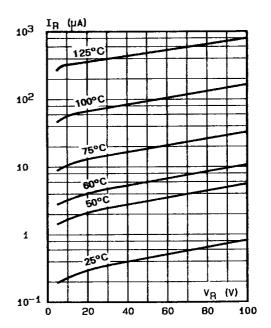
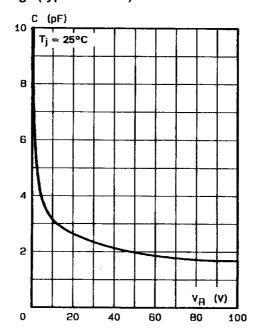
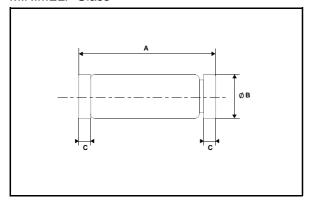


Figure 5. Forward current versus forward voltage (typical values).



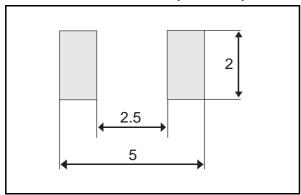
PACKAGE MECHANICAL DATA

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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