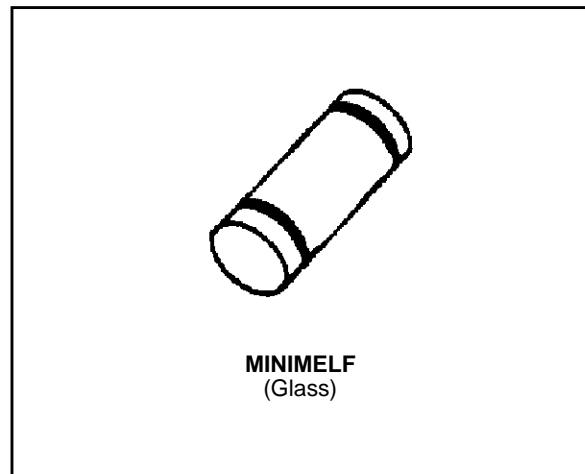


SMALL SIGNAL SCHOTTKY DIODE



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
I _F	Forward Continuous Current	T _I = 25 °C	150	mA
I _{FRM}	Repetitive Peak Forward Current	t _p ≤ 1s δ ≤ 0.5	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 °C
T _L	Maximum Temperature for Soldering during 15s		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.	Typ.	Max.	Unit
V_{BR}	$T_j = 25^\circ\text{C}$	$I_R = 100\mu\text{A}$	100			V
V_F^*	$T_j = 25^\circ\text{C}$	$I_F = 0.1\text{mA}$			0.25	V
	$T_j = 25^\circ\text{C}$	$I_F = 10\text{mA}$			0.45	
	$T_j = 25^\circ\text{C}$	$I_F = 250\text{mA}$			1	
I_R^*	$T_j = 25^\circ\text{C}$	$V_R = 1.5\text{V}$			0.5	μA
	$T_j = 60^\circ\text{C}$				5	
	$T_j = 25^\circ\text{C}$	$V_R = 10\text{V}$			0.8	
	$T_j = 60^\circ\text{C}$				7.5	
	$T_j = 25^\circ\text{C}$	$V_R = 50\text{V}$			2	
	$T_j = 60^\circ\text{C}$				15	
	$T_j = 25^\circ\text{C}$	$V_R = 75\text{V}$			5	
	$T_j = 60^\circ\text{C}$				20	

DYNAMIC CHARACTERISTICS

Symbol	Test Conditions		Min.	Typ.	Max.	Unit
C	$T_j = 25^\circ\text{C}$	$V_R = 0\text{V}$		10		pF
	$T_j = 25^\circ\text{C}$	$V_R = 1\text{V}$		6		

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

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

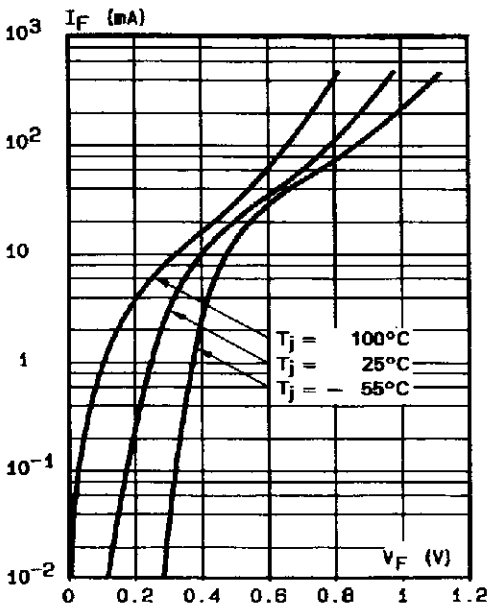


Figure 2. Forward current versus forward voltage (typical values).

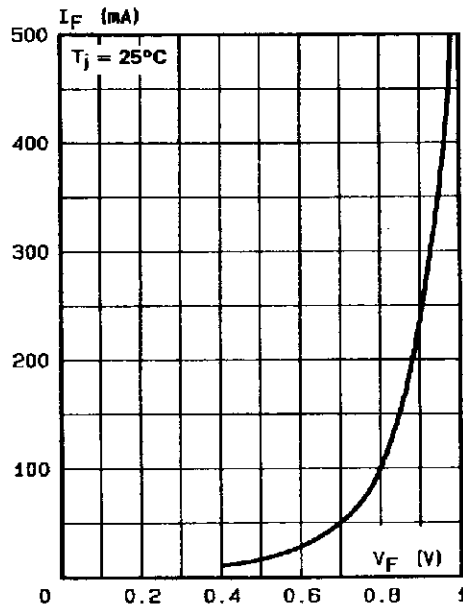


Figure 3. Reverse current versus junction temperature (typical values).

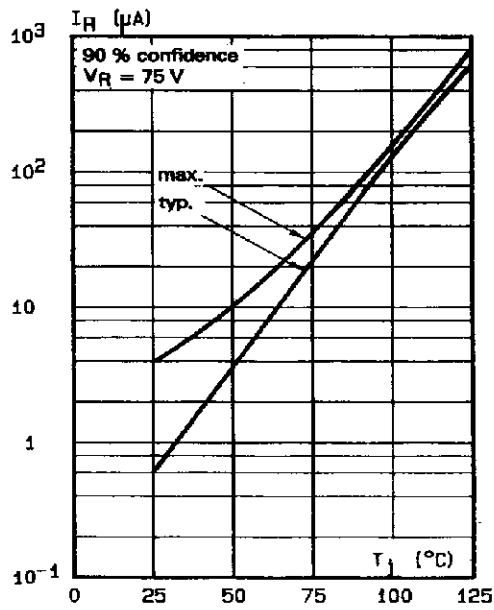


Figure 4. Reverse current versus continuous reverse voltage.

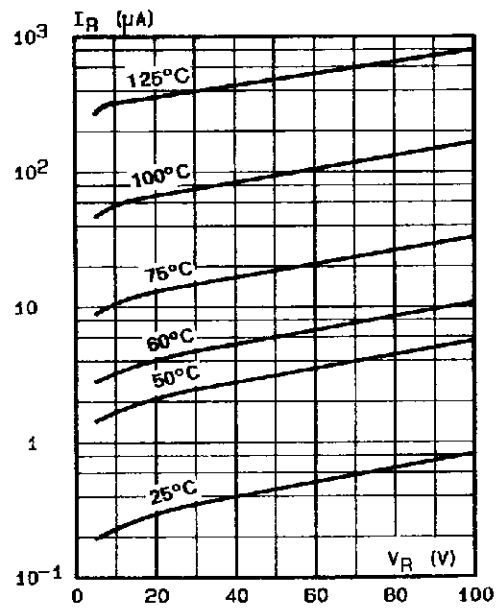
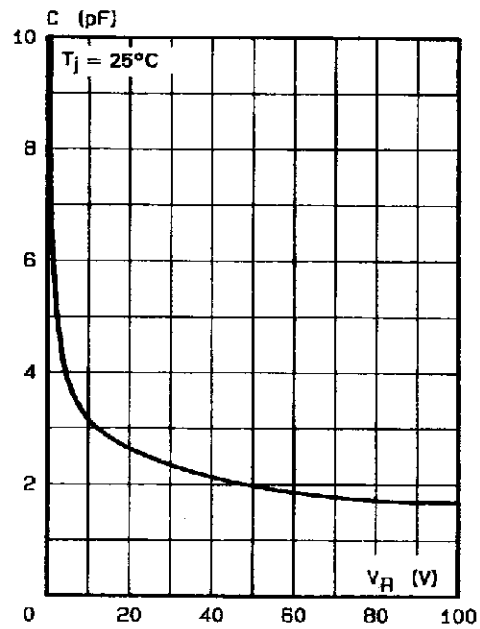


Figure 5. Forward current versus forward voltage (typical values).

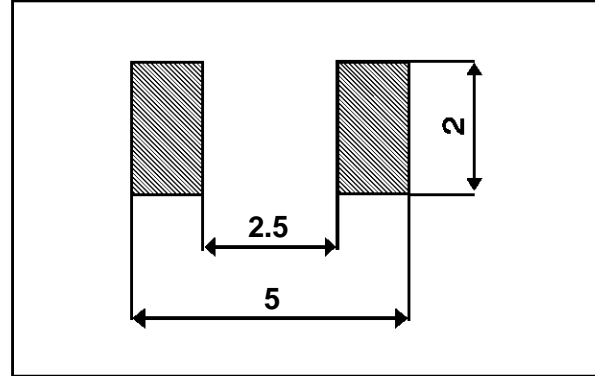
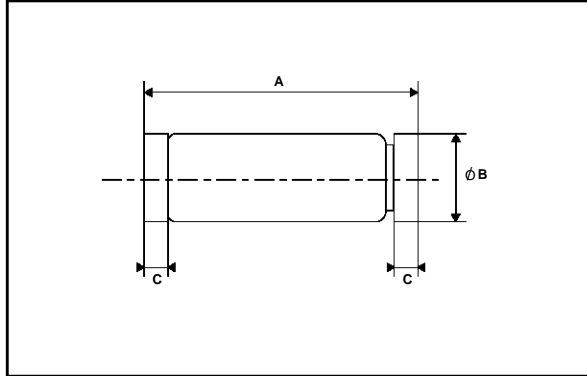


TMMBAT 46

PACKAGE MECHANICAL DATA

FOOT PRINT DIMENSIONS (Millimeter)

MINIMELF Glass



REF.	DIMENSIONS			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.3	3.6	0.130	0.142
B	1.59	1.62	0.063	0.064
C	0.4	0.5	0.016	0.020

Marking: ring at cathode end.
Weight: 0.05g

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