



## TMMDB3 / TMMDB3TG

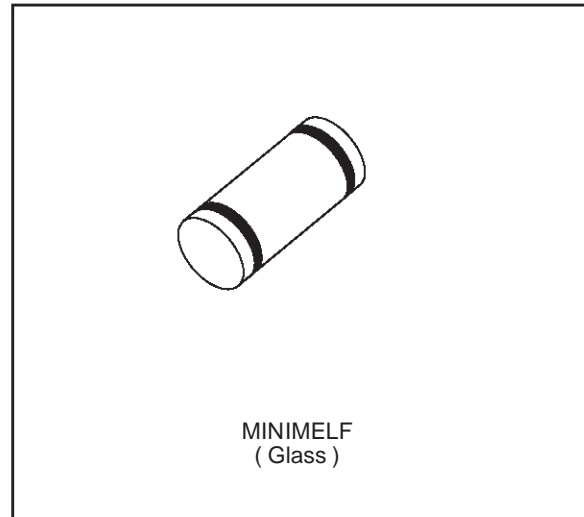
### TRIGGER DIODES

#### FEATURES

- $V_{BO}$  : 32V VERSION
- LOW BREAKOVER CURRENT

#### DESCRIPTION

High reliability glass passivation insuring parameter stability and protection against junction contamination.



#### ABSOLUTE RATINGS (limiting values)

Symbol	Parameter		Value	Unit
P	Power dissipation on printed circuit (L = 10 mm)	Ta = 65 °C	150	mW
I <sub>TRM</sub>	Repetitive peak on-state current	tp = 20 µs F = 100 Hz	2	A
T <sub>stg</sub> T <sub>j</sub>	Storage and operating junction temperature range		- 40 to + 125 - 40 to + 125	°C °C

#### THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
R <sub>th (j-a)</sub>	Junction to ambient	400	°C/W
R <sub>th (j-l)</sub>	Junction to tie-point	300	°C/W

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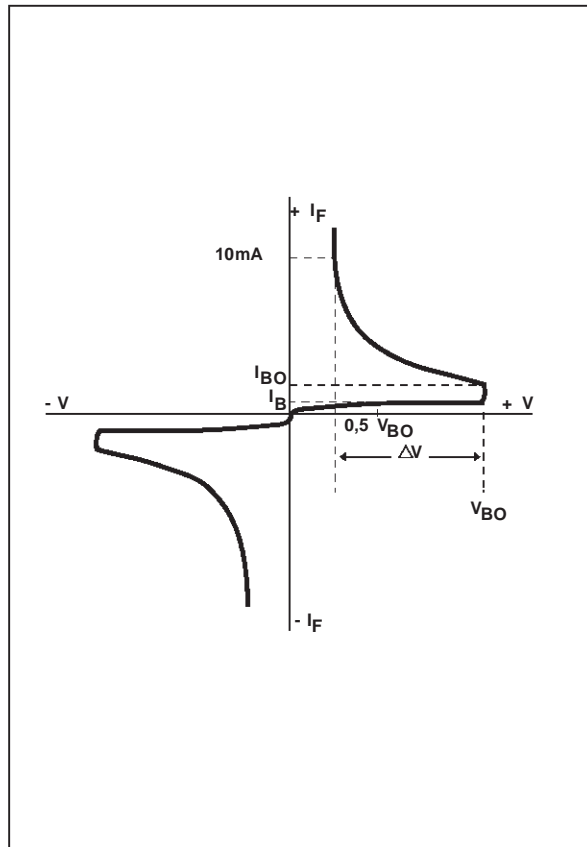
## ELECTRICAL CHARACTERISTICS (Tj = 25°C)

Symbol	Parameter	Test Conditions		Value		Unit
				TMMDB3	TMMDB3TG	
V <sub>BO</sub>	Breakover voltage *	C = 22nF ** see diagram 1	MIN	28	30	V
			TYP	32	32	
			MAX	36	34	
[ +V <sub>BO</sub>   -   -V <sub>BO</sub>  ]	Breakover voltage symmetry	C = 22nF ** see diagram 1	MAX	± 3	± 2	V
ΔV± I	Dynamic breakover voltage *	ΔI = [ I <sub>BO</sub> to I <sub>F</sub> = 10 mA ] see diagram 1	MIN	5		V
V <sub>O</sub>	Output voltage *	see diagram 2	MIN	5		V
I <sub>BO</sub>	Breakover current *	C = 22nF **	MAX	100	15	μA
t <sub>r</sub>	Rise time *	see diagram 3	TYP	1.5		μs
I <sub>B</sub>	Leakage current *	V <sub>B</sub> = 0.5 V <sub>BO</sub> max see diagram 1	MAX	10		μA

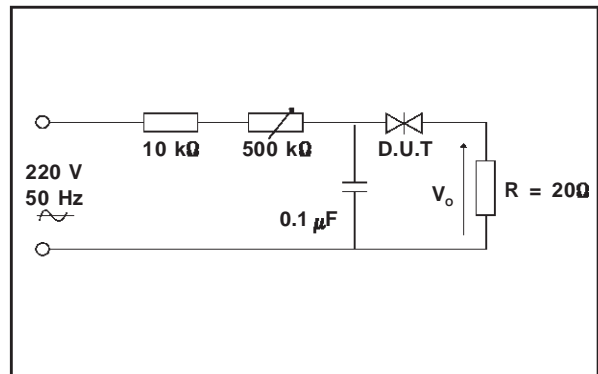
\* Electrical characteristic applicable in both forward and reverse directions.

\*\* Connected in parallel with the devices.

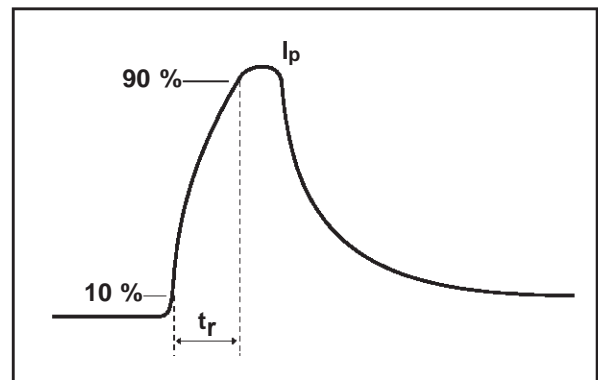
**DIAGRAM 1** : Current-voltage characteristics



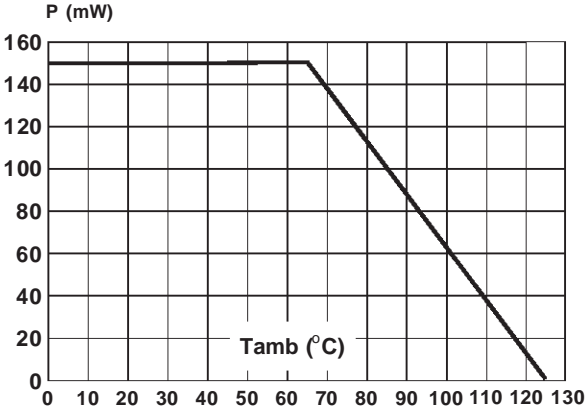
**DIAGRAM 2** : Test circuit for output voltage



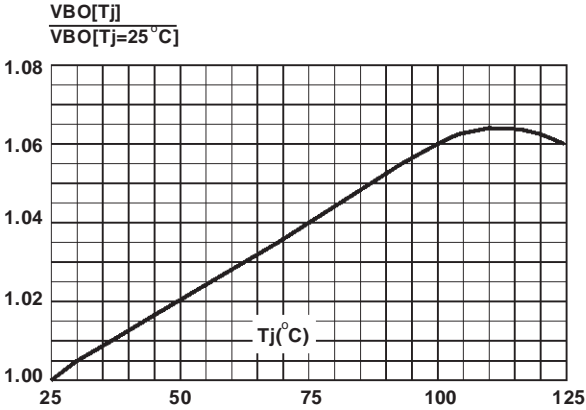
**DIAGRAM 3** : Test circuit see diagram 2.  
Adjust R for I<sub>p</sub> = 0.5A



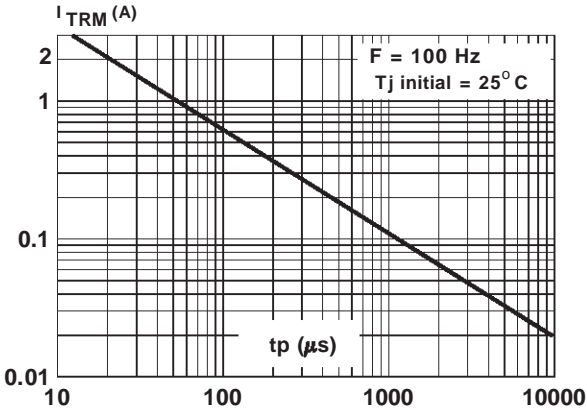
**Fig.1 :** Power dissipation versus ambient temperature (maximum values)



**Fig.2 :** Relative variation of V<sub>BO</sub> versus junction temperature (typical values)

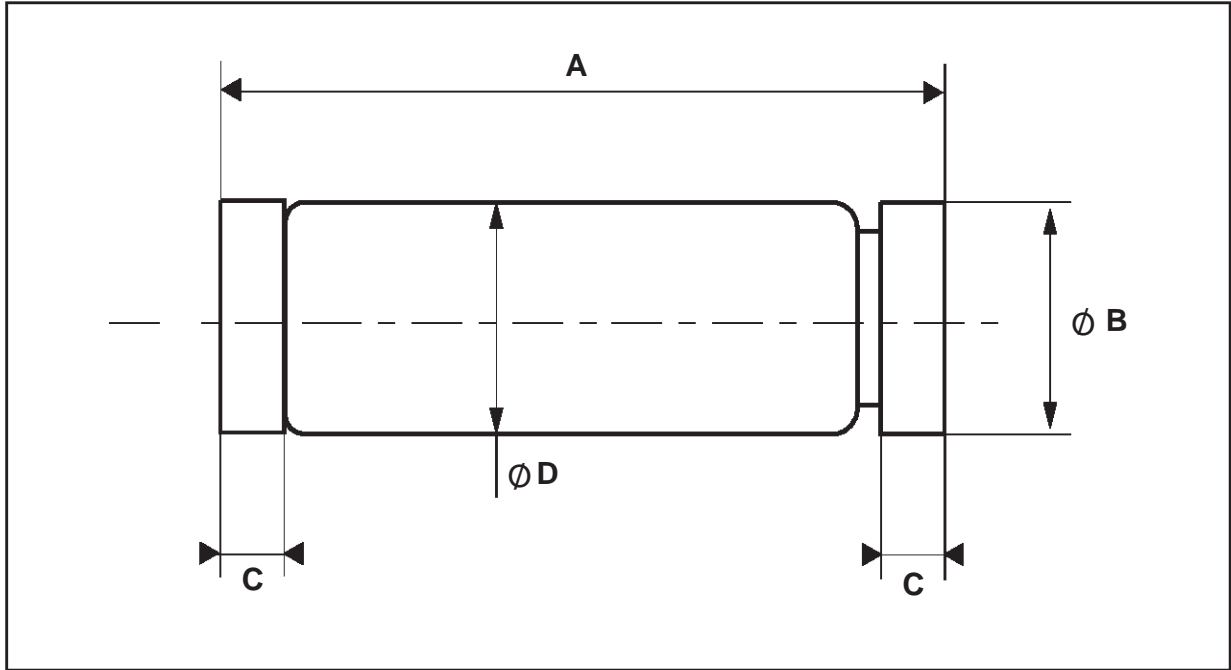


**Fig.3 :** Peak pulse current versus pulse duration (maximum values)



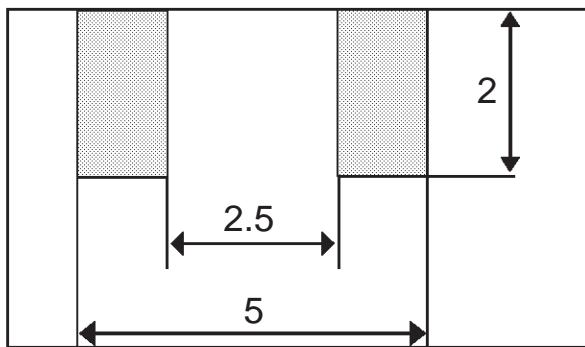
**TMMDB3/ TMMDB3TG**

**PACKAGE MECHANICAL DATA (in millimeters)**  
MINIMELF Glass



REF.	DIMENSIONS					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	3.30	3.40	3.6	0.130	0.134	0.142
Ø B	1.59	1.60	1.62	0.063	0.063	0.064
C	0.40	0.45	0.50	0.016	0.018	0.020
Ø D		1.50			0.059	

**FOOT PRINT (in millimeters)**



- **Marking** : Clear
- **Cooling method** by convection and conduction
- **Polarity** : N A
- **Stud torque** : N A
- **Weight** : 0.0380 g

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