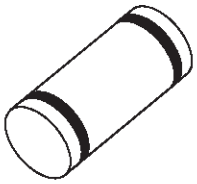
TMMDB3 / TMMDB3TG

TRIGGER DIODES

FEATURES

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



MINIMELF
(Glass)

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_{TRM}	Repetitive peak on-state current	tp = 20 µs F= 100 Hz	2	A
Tstg Tj	Storage and operating junction temperature range		- 40 to + 125 - 40 to + 125	°C °C

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th\ (j-a)}$	Junction to ambient	400	°C/W
$R_{th\ (j-l)}$	Junction to tie-point	300	°C/W

ELECTRICAL CHARACTERISTICS (Tj = 25°C)

Symbol	Parameter	Test Conditions		Value		Unit
				TMMDB3	TMMDB3TG	
V_{BO}	Breakover voltage *	C = 22nF ** see diagram 1	MIN	28	30	V
			TYP	32	32	
			MAX	36	34	
$[I+V_{BO}I-I-V_{BO}I]$	Breakover voltage symmetry	C = 22nF ** see diagram 1	MAX	± 3	± 2	V
$I\Delta V\pm I$	Dynamic breakover voltage *	$\Delta I = [I_{BO}$ to $I_F = 10$ mA] see diagram 1	MIN	5		V
V_O	Output voltage *	see diagram 2	MIN	5		V
I_{BO}	Breakover current *	C = 22nF **	MAX	100	15	µA
tr	Rise time *	see diagram 3	TYP	1.5		µs
I_B	Leakage current *	$V_B = 0.5\ V_{BO}$ 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

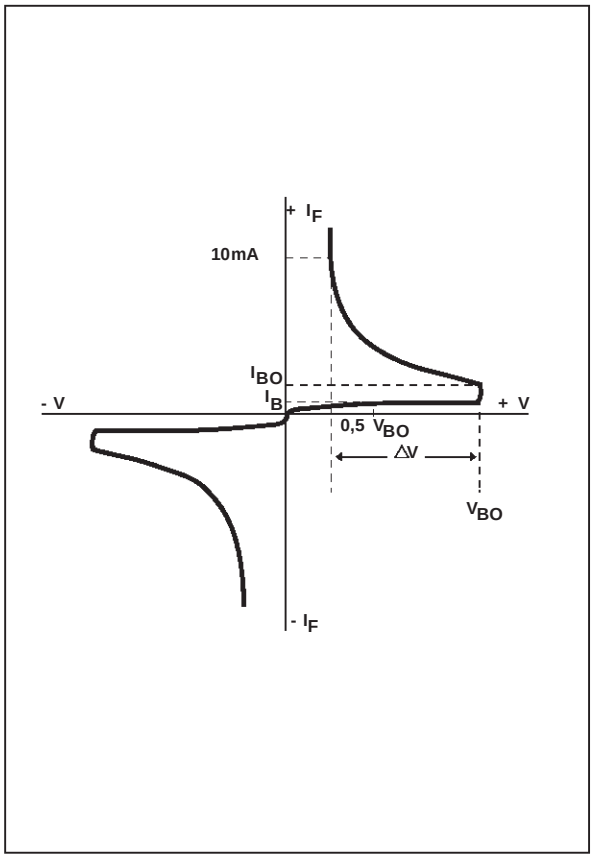


DIAGRAM 2 : Test circuit for output voltage

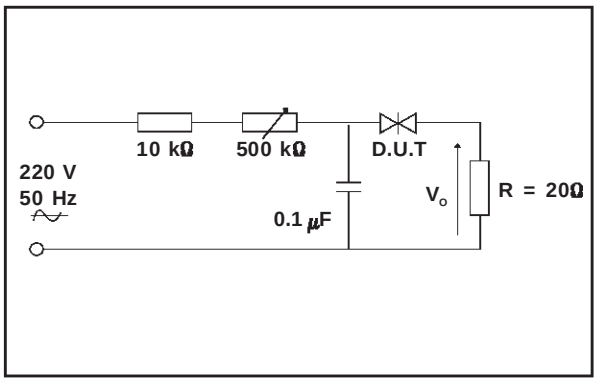


DIAGRAM 3 : Test circuit see diagram 2.
Adjust R for Ip = 0.5A

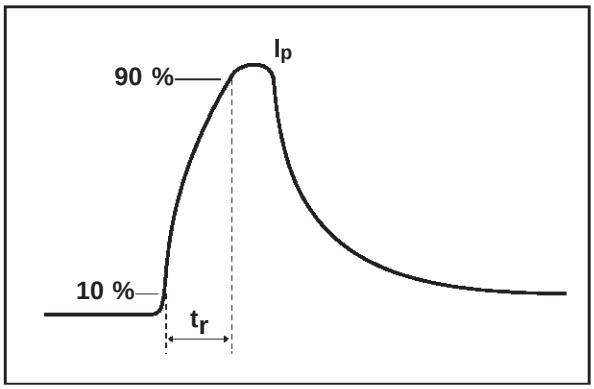


Fig.1 : Power dissipation versus ambient temperature (maximum values)

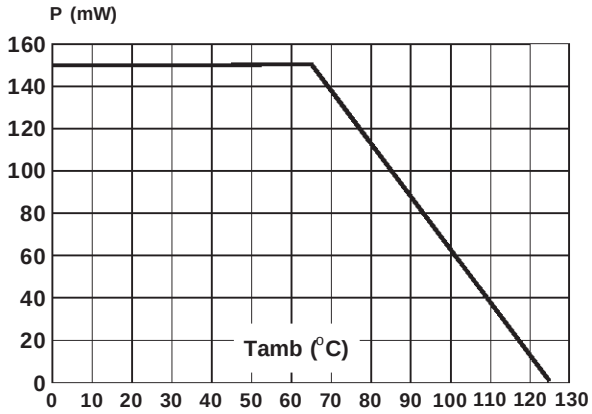


Fig.2 : Relative variation of V_{BO} versus junction temperature (typical values)

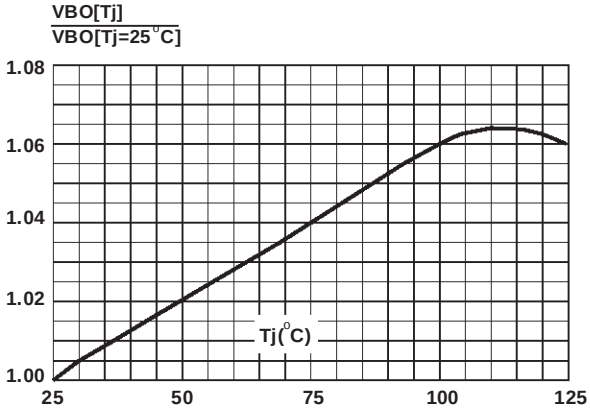
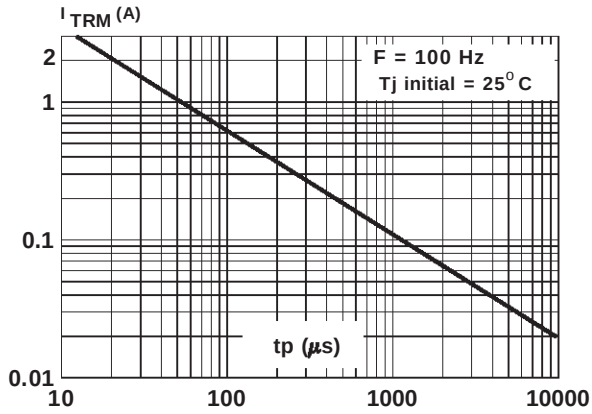
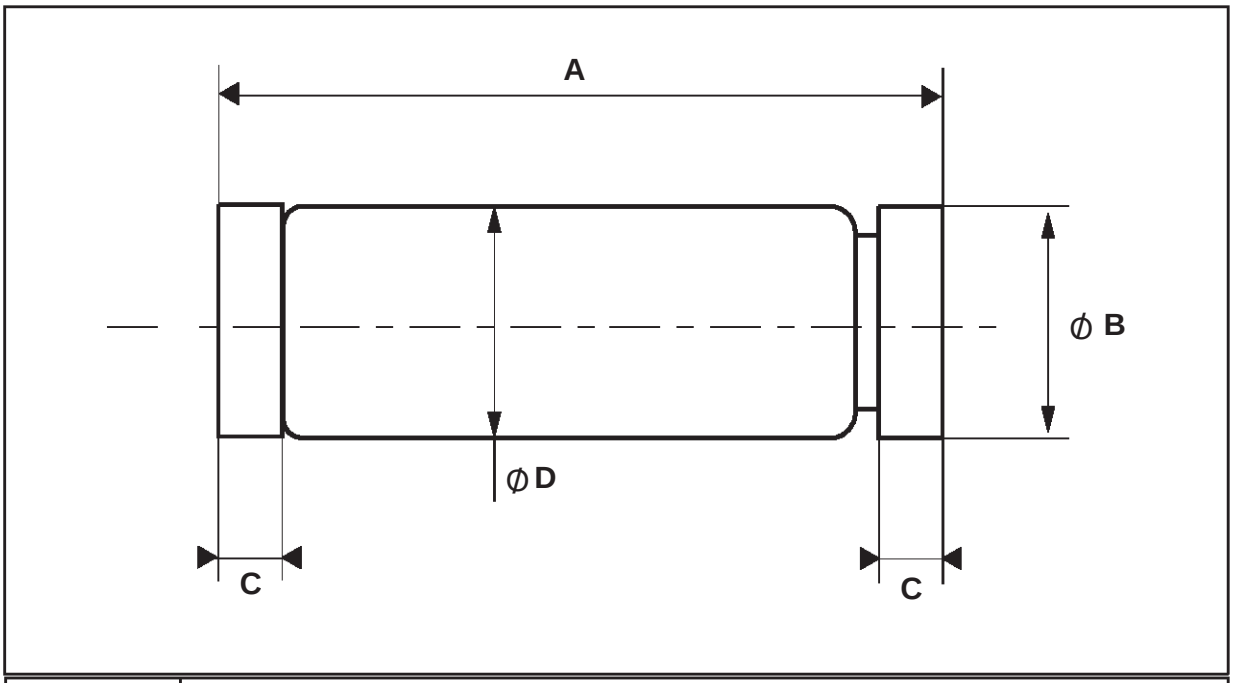


Fig.3 : Peak pulse current versus pulse duration (maximum values)

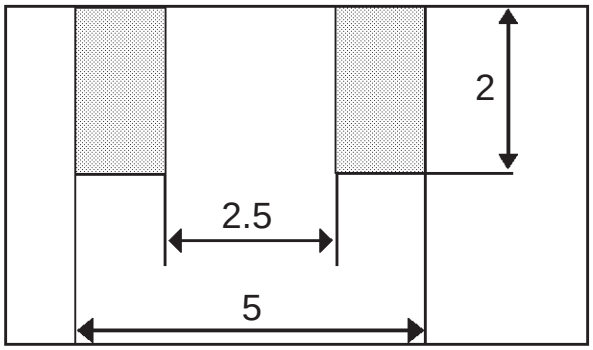


PACKAGE MECHANICAL DATA (in millimeters)
MINIMELF Glass



REF.	DIMENSIONS					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	3.30	3.40	3.6	0.130	0.134	0.142
∅ 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
∅ 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