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TMMDB3TG

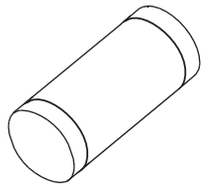
DIAC

FEATURES

- V_{BO} : 32V
- Low breakover current: 15µA max
- Breakover voltage range: 30 to 34V

DESCRIPTION

Functioning as a trigger diode with a fixed voltage reference, the TMMDB3TG can be used in conjunction with triacs for simplified gate control circuits or as a starting element in fluorescent lamp ballasts.



MINIMELF

ABSOLUTE MAXIMUM RATINGS (limiting values)

Symbol	Parameter	Value	Unit
I_{TRM}	Repetitive peak on-state current tp = 20 µs F= 120 Hz	2	A
Tstg Tj	Storage temperature range Operating junction temperature range	- 40 to + 125	°C

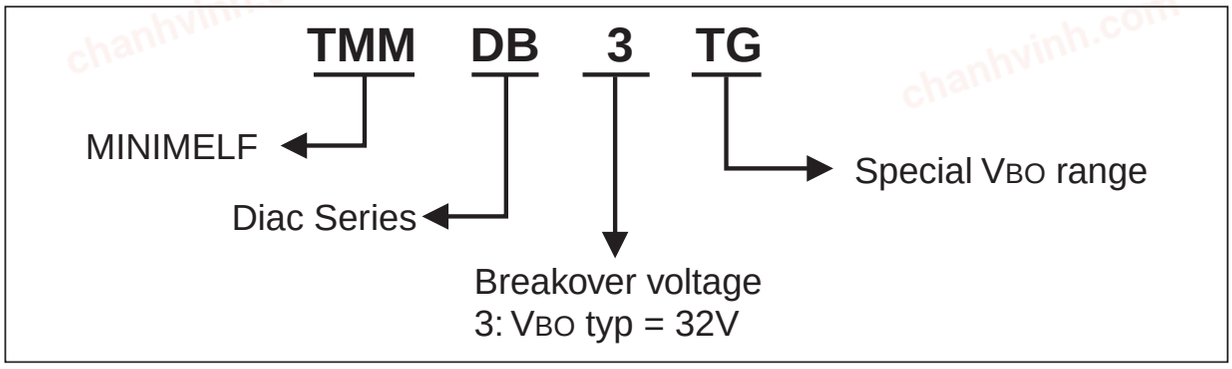
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ELECTRICAL CHARACTERISTICS (Tj = 25°C unless otherwise specified)

Symbol	Parameter	Test Conditions		Value	Unit
V_{BO}	Breakover voltage *	C = 22nF **	MIN.	30	V
			TYP.	32	
			MAX.	34	
I V_{BO1} - V_{BO2} I	Breakover voltage symmetry	C = 22nF **	MAX.	± 2	V
Δ V	Dynamic breakover voltage *	V_{BO} and V_F at 10mA	MIN.	9	V
V_O	Output voltage *	see diagram 2 (R=20Ω)	MIN.	5	V
I_{BO}	Breakover current *	C = 22nF **	MAX.	15	µA
tr	Rise time *	see diagram 3	MAX.	2	µs
I_R	Leakage current *	V_R = 0.5 V_{BO} max	MAX.	10	µA

* Applicable to both forward and reverse directions.
** Connected in parallel to the device.

ORDERING INFORMATION



OTHER INFORMATION

Part Number	Marking	Weight	Base Quantity	Packing Mode
TMMDB3TG	(None)	0.04 g	2500	Tape & Reel

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Diagram 1: Voltage - current characteristic curve.

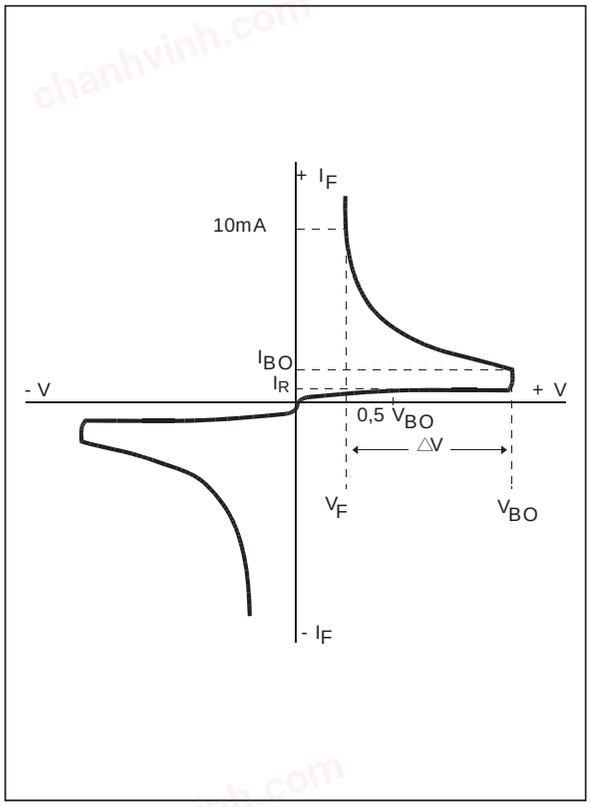


Diagram 2: Test circuit.

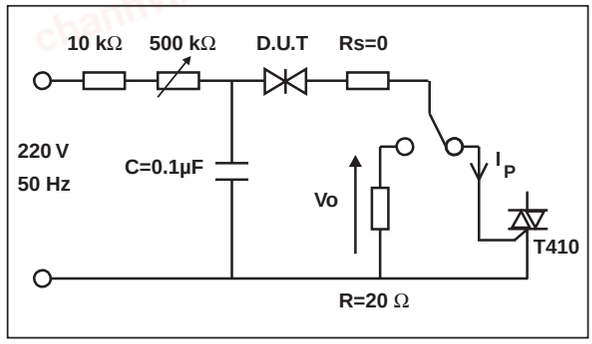


Diagram 3: Rise time measurement.

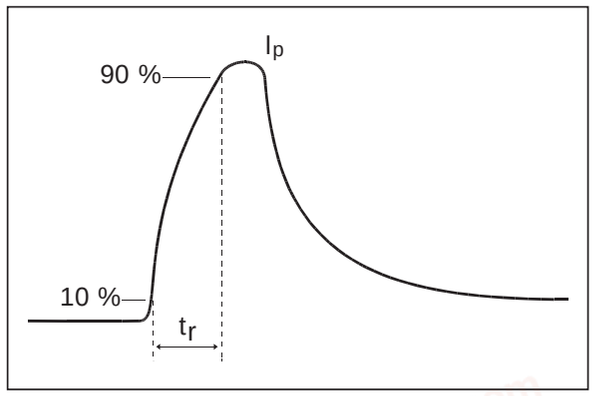


Fig. 1: Relative variation of VBO versus junction temperature (typical values)

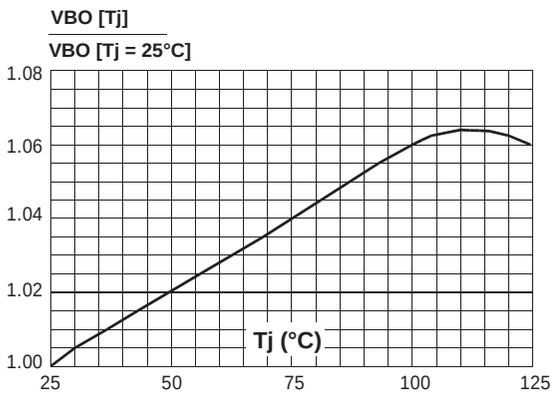
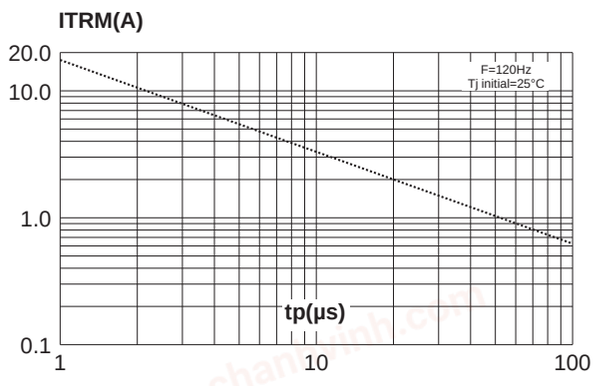
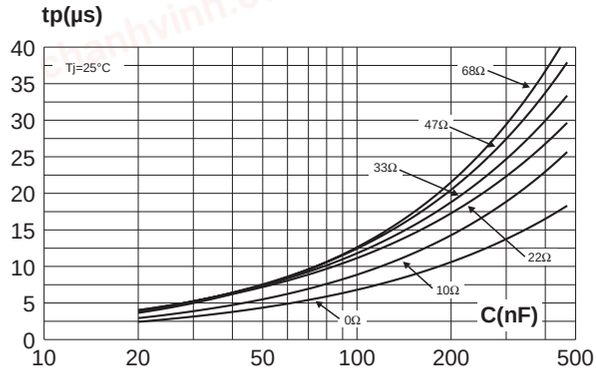


Fig. 2: Repetitive peak pulse current versus pulse duration (maximum values).



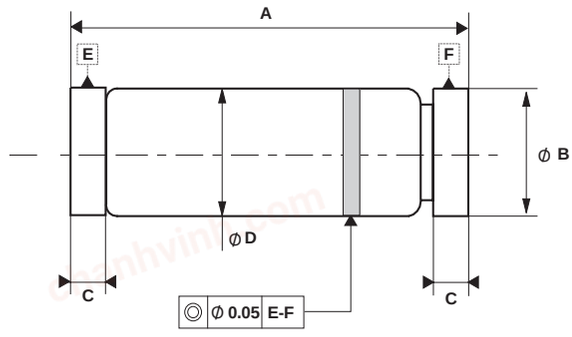
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Fig. 3: Time duration while current pulse is higher 50mA versus C and Rs (typical values).



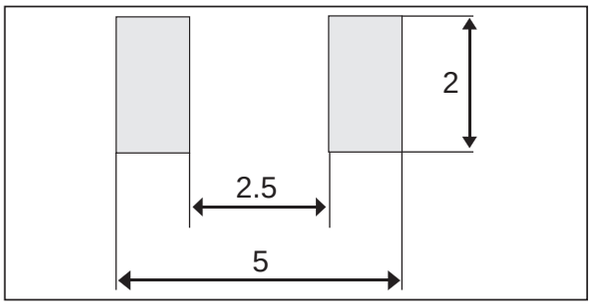
PACKAGE MECHANICAL DATA (in millimeters)

MINIMELF



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	

FOOTPRINT



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