



TRIGGER DIODES

APPLICATIONS

Thyristors and triacs triggering.

ADVANTAGES

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)	T _a = 50 °C	150	mW
I _{TRM}	Repetitive Peak on-state Current	t _p = 20 μs F = 100 Hz	2	A
T _{stg} T _j	Storage and Operating Junction Temperature Range		- 40 to 125 - 40 to 110	°C °C

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
R _{th (j-a)}	Junction-ambient	400	°C/W
R _{th (j-l)}	Junction-leads	150	°C/W

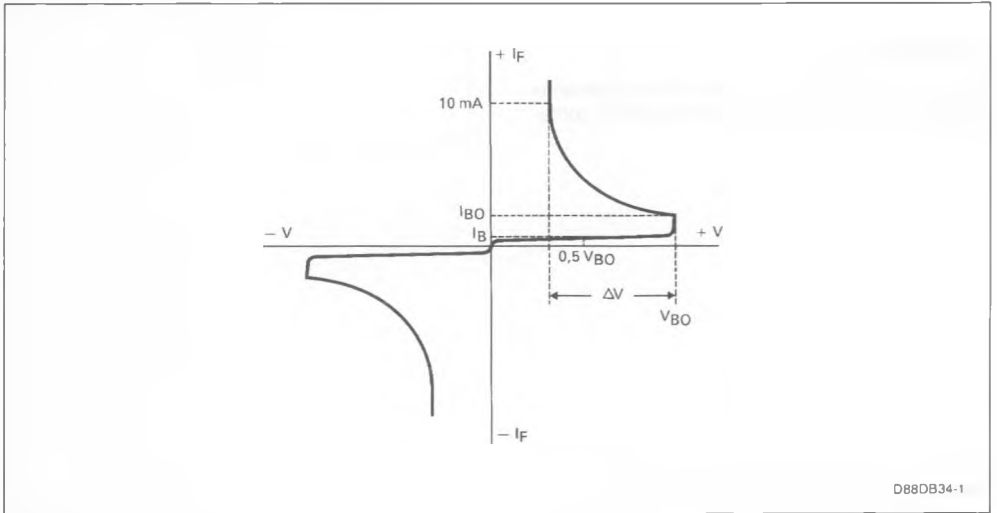
ELECTRICAL CHARACTERISTICS (T_j = 25 °C)

Symbol	Parameter	Test Conditions	Types	Min.	Typ.	Max.	Unit
V _{BO}	Breakover Voltage*	C = 22 nF** See diagram 1	DC34 DC38 DC42	30 35 39	34 38 42	38 42 45	V
[+V _{BO} - V _{BO}]	Breakover Voltage Symmetry	C = 22 nF** See diagram 1				± 3	V
ΔV±	Dynamic Breakback Voltage*	ΔI = [I _{BO} to I _F = 10 mA] See diagram 1		5			V
V _O	Output Voltage*	See diagram 2		5			V
I _{BO}	Breakover Current*	C = 22 nF**				50	μA
t _r	Rise Time*	See diagram 3			1.5		μs
I _B	Leakage Current*	V _B = 0.5 V _{BO} max See diagram 1				10	μA

* Electrical characteristic applicable in both forward and reverse directions.

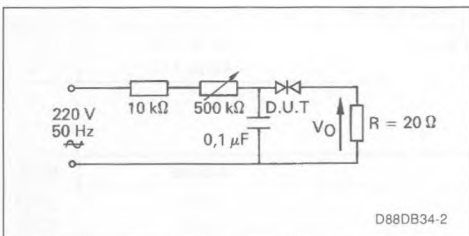
** Connected in parallel with the device.

DIAGRAM 1 : Current-voltage characteristics.



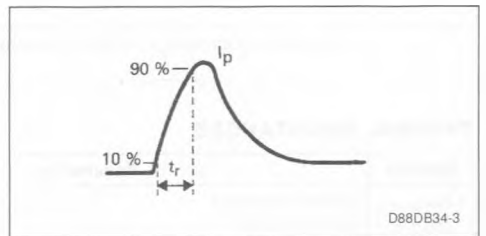
D88DB34-1

DIAGRAM 2 : Test circuit for output voltage.



D88DB34-2

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



D88DB34-3

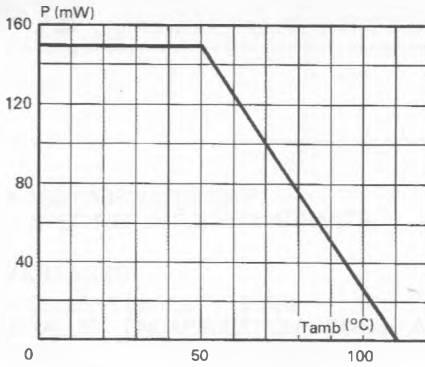


Fig. 1 - Power dissipation versus ambient temperature (maximum values).

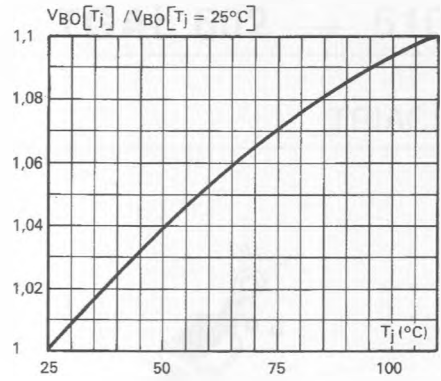


Fig. 2 - Relative variation of V_{BO} versus junction temperature (typical values).

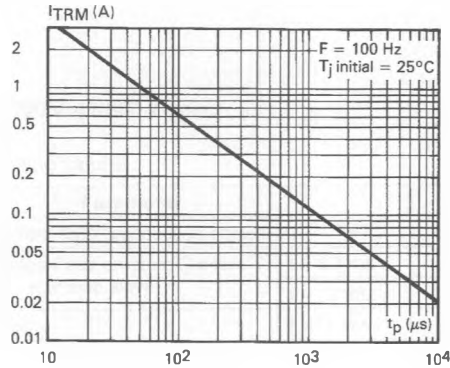
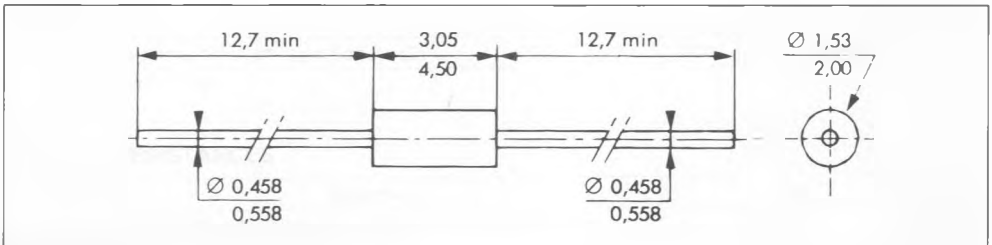


Fig. 3 - Peak pulse current versus pulse duration (maximum values).

PACKAGE MECHANICAL DATA

DO 35 Glass



Weight : 0.15 g
Marking : clear