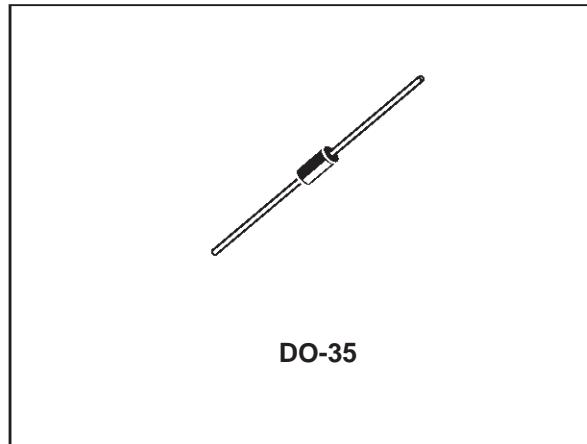


DIAC**FEATURES**

- 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 DB3TG can be used in conjunction with triacs for simplified gate control circuits or as a starting element in fluorescent lamp ballasts.

**ABSOLUTE MAXIMUM RATINGS** (limiting values)

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

DB3TG

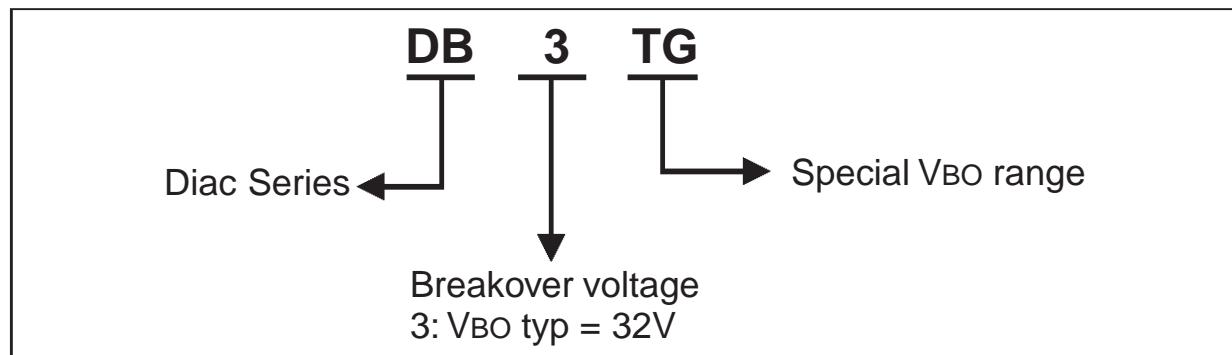
ELECTRICAL CHARACTERISTICS ($T_j = 25^\circ\text{C}$ unless otherwise specified)

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

* 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
DB3TG	DB3TG (Blue Body Coat)	0.15 g	5000	Tape & Reel

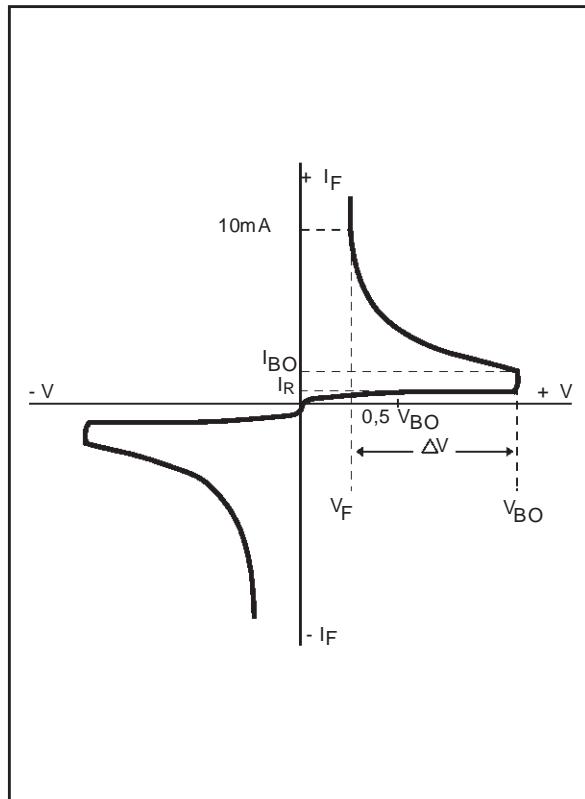
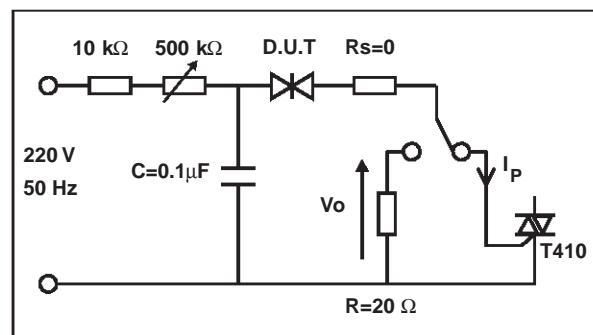
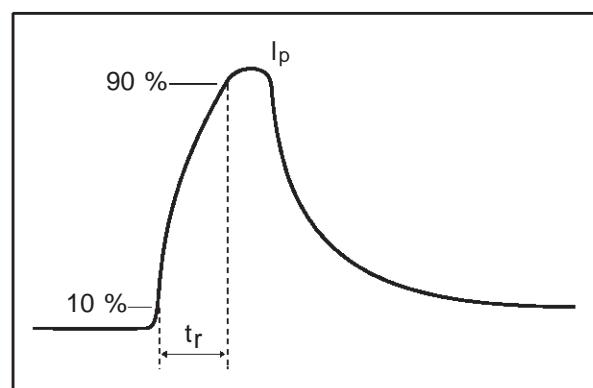
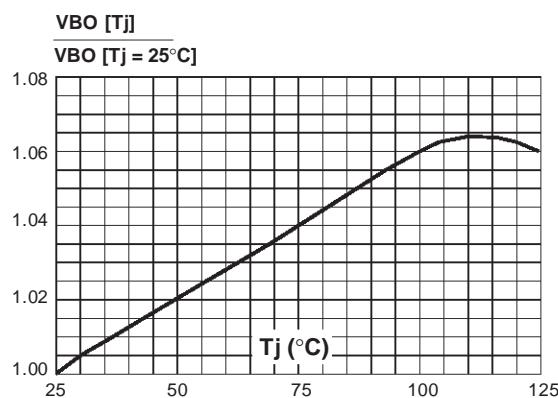
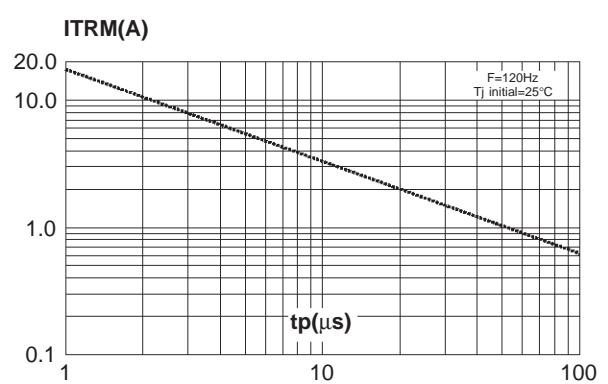
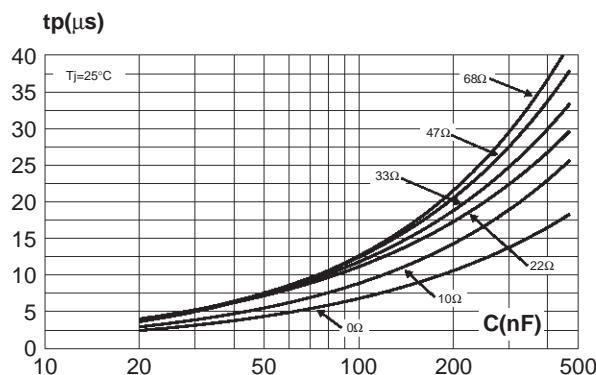
Diagram 1: Voltage - current characteristic curve.**Diagram 2:** Test circuit.**Diagram 3:** Rise time measurement.**Fig. 1:** Relative variation of V_{BO} versus junction temperature (typical values)**Fig. 2:** Repetitive peak pulse current versus pulse duration (maximum values).

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



PACKAGE MECHANICAL DATA (in millimeters)

DO-35

REF.	DIMENSIONS			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.05	4.50	0.120	0.177
B	1.53	2.00	0.060	0.079
C	12.7		0.500	
D	0.458	0.558	0.018	0.022

The mechanical drawing shows a rectangular package with a lead frame. Dimension A is the total width, C is the distance between leads, ØB is the lead pitch, and ØD is the lead thickness. Dimension D is the lead height.

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