

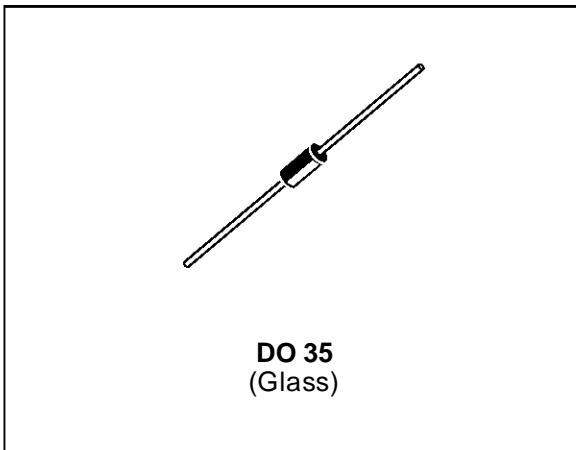
## TRIGGER DIODES

### FEATURES

- $V_{BO}$  : 32V / 34V / 40V VERSIONS
- 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-leads	150	°C/W

## DB3 / DB4 / DC34

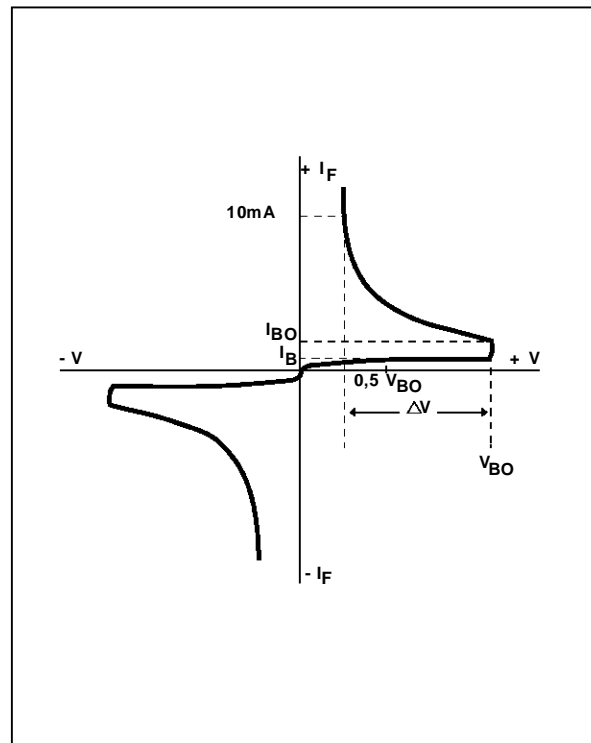
### ELECTRICAL CHARACTERISTICS (T<sub>j</sub> = 25°C)

Symbol	Parameter	Test Conditions		Value			Unit
				DB3	DC34	DB4	
V <sub>BO</sub>	Breakover voltage *	C = 22nF ** see diagram 1	MIN	28	30	35	V
			TYP	32	34	40	
			MAX	36	38	45	
[I+V <sub>BO</sub> -I-V <sub>BO</sub> ]	Breakover voltage symmetry	C = 22nF ** see diagram 1	MAX	± 3			V
IΔV± I	Dynamic breakover voltage *	ΔI = [I <sub>BO</sub> to I <sub>F</sub> =10mA] 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	50	100	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

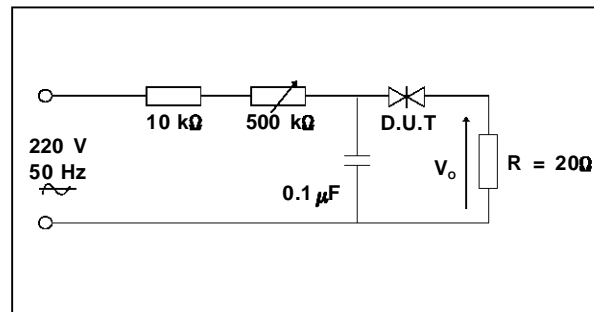
\* Electrical characteristic applicable in both forward and reverse directions.

\*\* Connected in parallel with the devices.

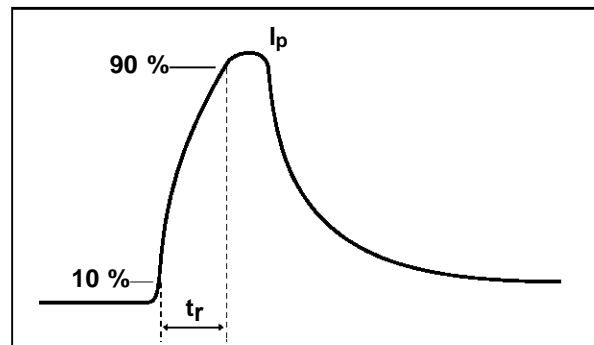
**DIAGRAM 1 : Current-voltage characteristics**



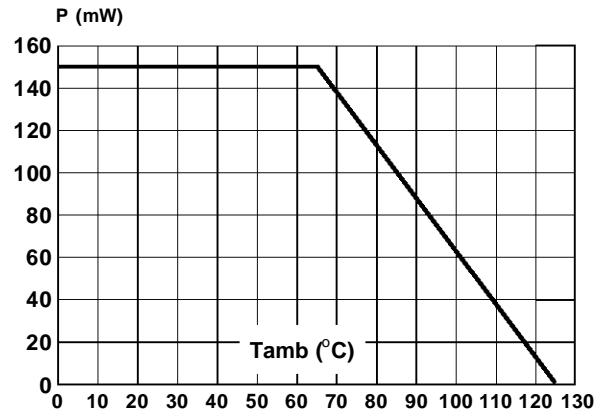
**DIAGRAM 2 : Test circuit for output voltage**



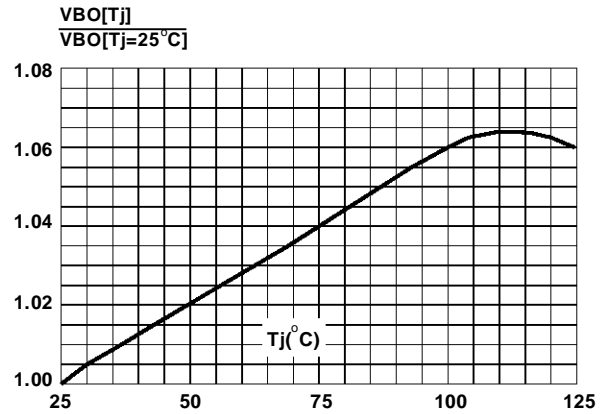
**DIAGRAM 3 : Test circuit see diagram 2.  
Adjust R for I<sub>p</sub>=0.5A**



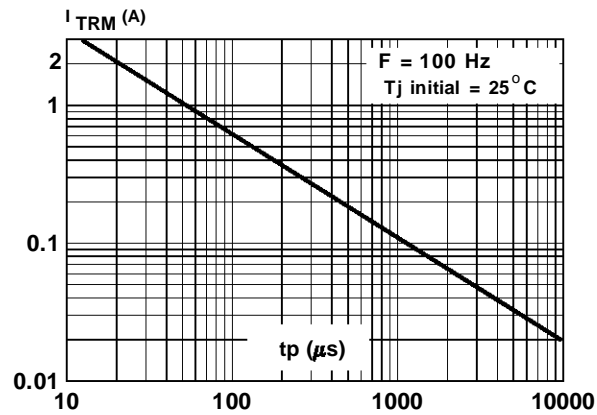
**Fig.1 :** Power dissipation versus ambient temperature (maximum values)



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

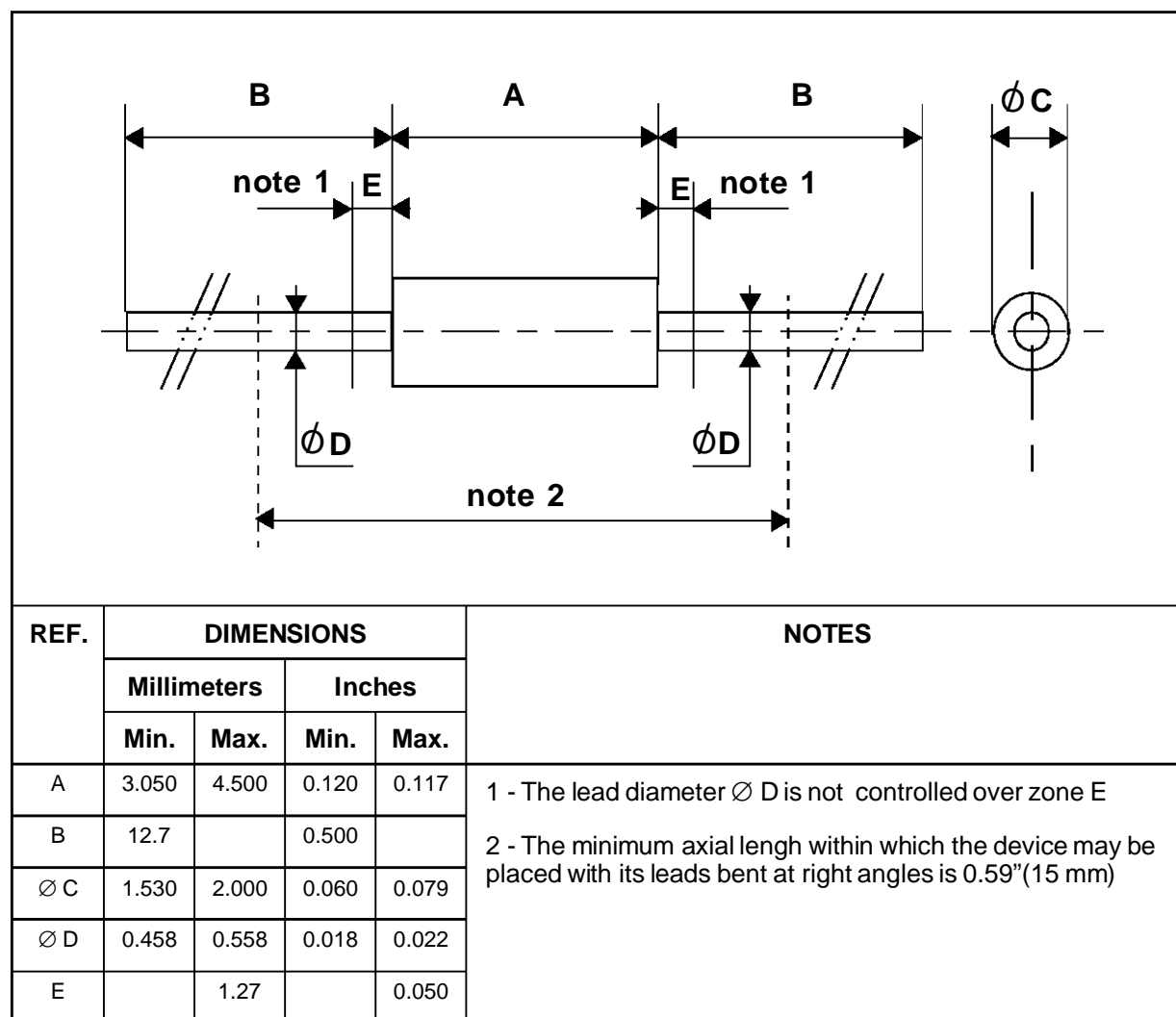


**Fig.3 :** Peak pulse current versus pulse duration (maximum values)



**DB3 / DB4 / DC34****PACKAGE MECHANICAL DATA** (in millimeters)

DO 35 Glass



Cooling method by convection and conduction  
Marking : type number  
Weight : 0.15 g

Polarity : N A  
Stud torque : N A

Information furnished is believed to be accurate and reliable. However, SGS-THOMSON Microelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of SGS-THOMSON Microelectronics. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. SGS-THOMSON Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of SGS-THOMSON Microelectronics.

© 1995 SGS-THOMSON Microelectronics - All rights reserved.

Purchase of I<sup>2</sup>C Components by SGS-THOMSON Microelectronics, conveys a license under the Philips I<sup>2</sup>C Patent. Rights to use these components in an I<sup>2</sup>C system, is granted provided that the system conforms to the I<sup>2</sup>C Standard Specifications as defined by Philips.

SGS-THOMSON Microelectronics GROUP OF COMPANIES

Australia - Brazil - France - Germany - Hong Kong - Italy - Japan - Korea - Malaysia - Malta - Morocco - The Netherlands - Singapore - Spain - Sweden - Switzerland - Taiwan - Thailand - United Kingdom - U.S.A.