KEL®

SEMICONDUCTOR

KELDB3

DO-35 Hermetically
Sealed Glass BI-directional Trigger Diode



AXIAL LEAD
DO35

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation @ Ta = 50℃	150	mW
I_{TRM}	Repetitive peak on-state current tp = 20us, F = 120Hz	2	A
T_{stg} T_j	Storage temperature range Operating junction temperature	-40 ~ 125	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

DEVICE MARKING DIAGRAM



Specification Features:

- V_{BO} = 32V
- DO-35 Package (JEDEC)
- Through-Hole Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Leads Are Readily Solderable
- RoHS Compliant
- Solder Hot Dip Tin (Sn) Terminal Finish

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
V_{BO}	Breakover Voltage	C = 22nF (note 2)	28	36	Volts
$[V_{BO'}]$- $[V_{BO}]$	Breakover Voltage Symmetry	C = 22nF (note 2)		3	Volts
[ΔV]	Dynamic Breakover Voltage	V_{BO} and VF at 10mA	5		Volts
Vo	Output Voltage	See diagram 2 (R = 20Ω)	5		Volts
I_{BO}	Breakover Current	C = 22nF (note 2)		50	uA
T_R	Rise Time	See diagram 3		2	uS
I_B	Leakage Current	V_R = 0.5V_{BO} max		10	uA
I_P	Peak Current	See diagram 2		0.3	A

Notes:
1. All parameters applicable to both forward and reverse directions.
2. Connected in parallel in the device

DIAGRAM 1: VOLTAGE – CURRENT CHARACTERISTIC CURVE

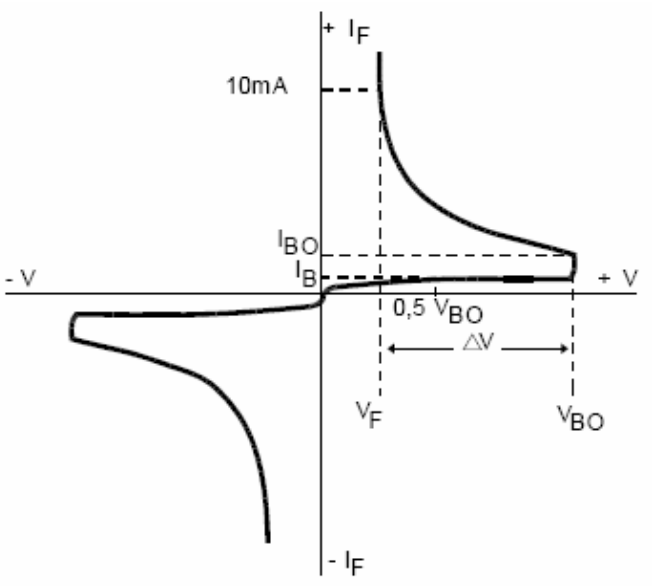


DIAGRAM 2: TEST CIRCUIT

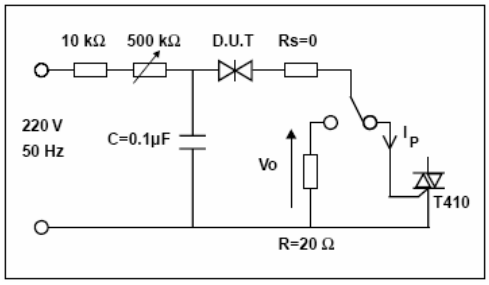
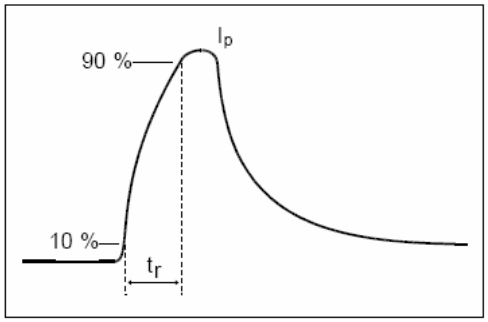
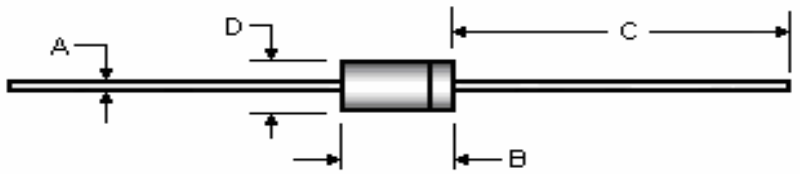


DIAGRAM 3: RISE TIME MEASUREMENT



Package Outline

Package	Case Outline
DO-35	

DIM	DO-35			
	Millimeters		Inches	
	Min	Max	Min	Max
A	0.46	0.55	0.018	0.022
B	3.05	5.08	0.120	0.200
C	25.40	38.10	1.000	1.500
D	1.53	2.28	0.060	0.090

Notes:

1. All dimensions are within JEDEC standard.

NOTICE

The information presented in this document is for reference only. Tak Cheong reserves the right to make changes without notice for the specification of the products displayed herein.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damagers resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http://www.takcheong.com, or consult your nearest Tak Cheong's sales office for further assistance.