DB3/DB4

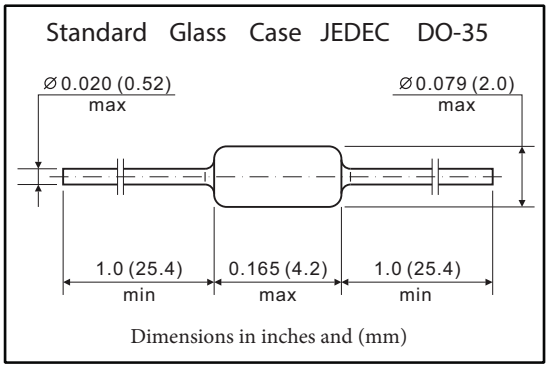
Power dissipation - 150mW

Current - 2 Ampere

BIDIRECTIONAL DIAC

FEATURES

- The three layer, two terminal, axial lead, hermetically sealed diacs are designed specifically for triggering thyristors.
- They demonstrate low breakover current at breakover voltage as they withstand peak pulse current, The breakover symmetry is within three volts (DB3, DB4).
- These diacs are intended for use in thyrisitors phase control, circuits for lamp dimming, universal motor speed control, and heat control.



MECHANICAL DATA

- Case: DO-35 Glass Case
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026 Mounting
- Position: Any
- Weight: approx. 0.005 ounce, 0.14grams

ABSOLUTE MAXIMUM RATINGS T_A=25 ^{0}C

Parameter	Test Condition	Symbol	Value	Unit
Repetitive peak on-state current	t_p = 20 μs, f = 120Hz	I_{TRM}	2	A
Power dissipation	l = 4 mm, $T_L \leqslant$ 25 ^{o}C	P_{tot}	150	mW
Junction temperature		T_j	125	^{o}C
Storage temperature		T_{stg}	- 40 ~ 125	^{o}C

ELECTRICAL CHARACTERISTICS T_A=25 ^{0}C

Parameter	Test Condition	Part	Symbol	Min	Typ.	Max	Unit
Breakover voltage *	C = 22 nF **	DB3	V_{BO}	28	32	36	V
		DB4	V_{BO}	35	40	45	V
Breakover voltage symmetry	C = 22 nF **		$\lvert V_{BO1}-V_{BO2}\rvert$	——	——	3	V
Dynamic breakover voltage *	V_{BO} and V_F @ 10 mA		ΔV	5	——	——	V
Output voltage *	See diagram 3 (R=20Ω)		V_O	5	——	——	V
Breakover current *	C = 22 nF **		I_{BO}	——	——	50	μA
Rise time *	See diagram 2		tr	——	——	2	μs
Leakage current *	V_R = 0.5 V_{BO} max		I_R	——	——	10	μA
Peak current *	See diagram 3 (Gate)		I_P	0.30	——	——	A

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

Email: sales@micindia.com Website: www.micindia.com

DB3/DB4

Power dissipation - 150mW

Current - 2 Ampere

BIDIRECTIONAL DIAC

Diagram 1:
Voltage -current characteristic curve

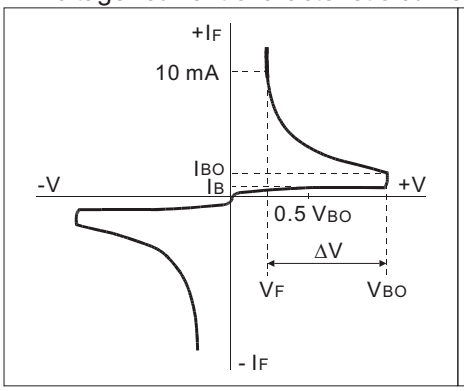


Diagram 2:
Rise time measurement

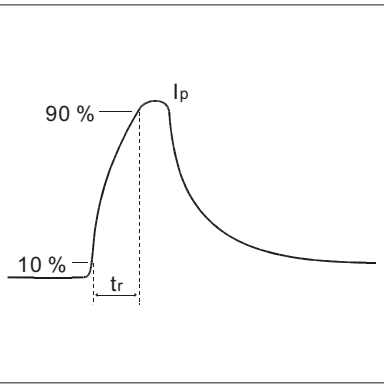
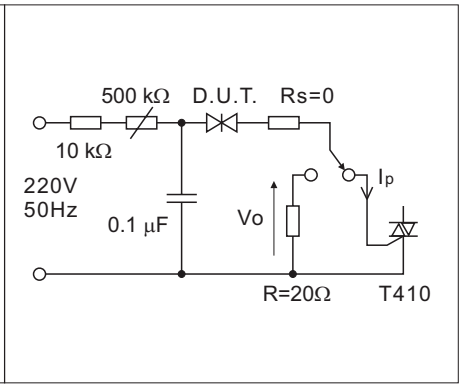
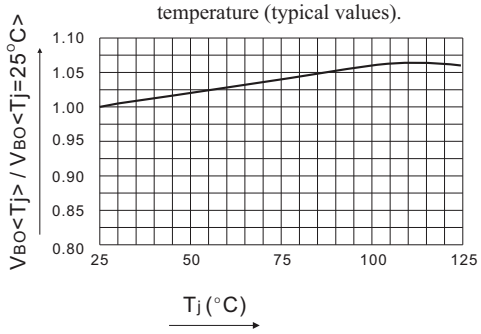


Diagram 3:
Test circuit

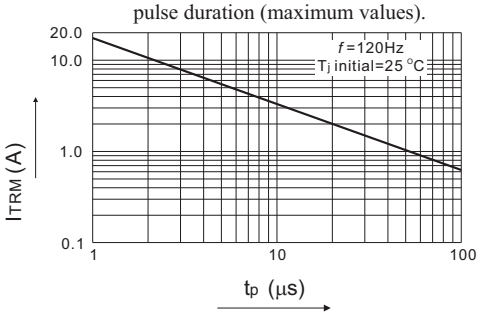


RATING AND CHARACTERISTIC CURVES DB3/DB4

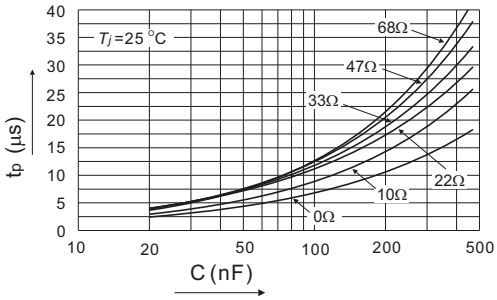
Relative variation of VBO versus junction temperature (typical values).



Repetitive peak pulse current versus pulse duration (maximum values).



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



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.

Email: sales@micindia.com Website: www.micindia.com