

# **Bidirectional DIAC Trigger Diode**

**DB3/DB4** 

# **Bidirectional DIAC Trigger Diode**

### **Features**

- Low breakover current
- Excellent symmetry
- Very low leakage current
- Trigger diode with a fixed voltage reference
- High temperature soldering guaranteed: 250°C/10s/9.5mm lead length at 5 lbs tension
- RoHS Compliance



DO-35



### **Mechanical Data**

Case:	Glass Case DO-35	
Terminals:	Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026	
Weight:	Approx. 0.13 gram	

### **Maximum Ratings** (*T* Ambient=25°C unless noted otherwise)

Symbol	Description	DB3	DB4	Unit
PD	Power Dissipation on Printed Circuit (L=10mm) (Ta=50°C)	150		mW
ITRM	Repetitive Peak on-state Current (tp=20µs, f=100Hz)	2		Α
TJ	Operating Temperature Range	-40 to +110		° C
Тѕтс	Storage Temperature Range -40 to +125		° C	
Reja	Thermal Resistance Junction to Ambient Air 400		° C/W	
Rejl	Thermal Resistance Junction to Case 150		50	° C/W

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Rev. B/AH

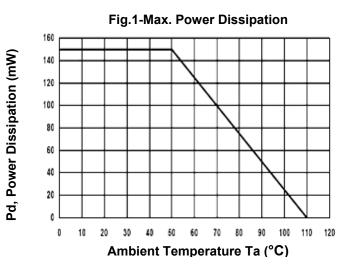
Tel: (800)-TAITRON (800)-824-8766 (661)-257-6060 Fax: (800)-TAITFAX (800)-824-8329 (661)-257-6415

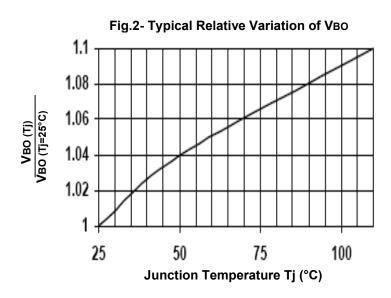
# Electrical Characteristics (T Ambient=25°C unless noted otherwise)

Symbol	Description		Min.	Max.	Unit	Conditions
* <b>V</b> во	*Breakover Voltage	DB3	28	36	V	**C=22nF See Fig.4
		DB4	35	45	V	
[ I+VBoI-I-VBoI ]	Breakover Voltage Symmetry		-3	3	V	**C=22nF, See Fig.4
±∆ <b>V</b>	**Dynamic Breakover Voltage		5	-	V	$\Delta$ 1=[ IBO to IF=10mA ] See Fig.4
Vo	*Output Voltage		5	-	٧	See Fig.6
Іво	*Breakover Current		-	50	μA	**C=22nF
Tr	*Rise Time		Typ.1.5		μs	See Fig.5
lв	*Leakage Current		-	10	μA	VB=0.5, VBO Max. See Fig.4

<sup>\*</sup>Electrical characteristic applicable in both forward and reverse directions.

### **Typical Characteristics Curves**





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<sup>\*\*</sup>Connected in parallel with the devices.

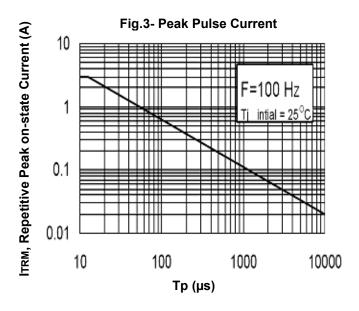


Fig.4- Current-Voltage Characteristics

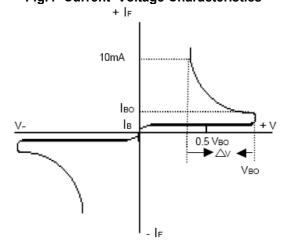


Fig.5- Rise Time Measurement

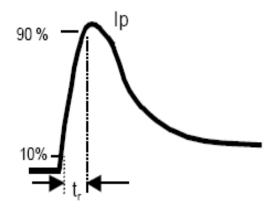
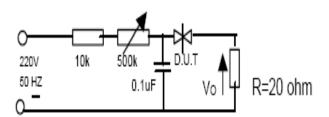
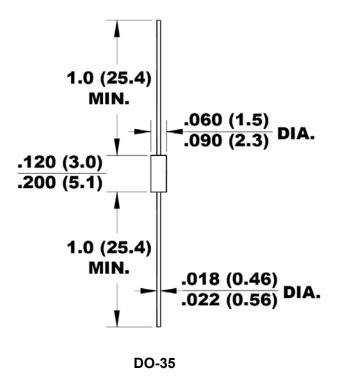


Fig.6-Test Circuit for Output Voltage



# **Dimensions in inches (mm)**





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