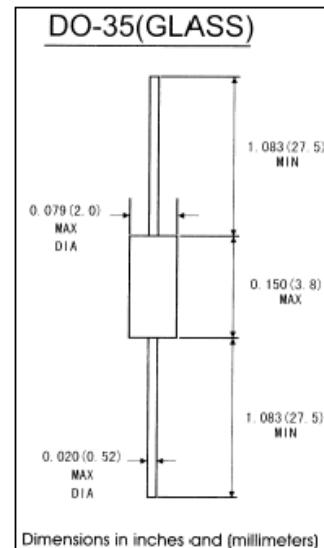




## FEATURES

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,DC34,DB4) or four volts(DB6). These diacs are intended for use in thyristor phase control, circuits for lamp dimming, universal motor speed control, and heat control.

JF's DB3/DC34/DB4/DB6 are bi-directional triggered diode designed to operate in conjunction with Triacs and SCR's



## ABSOLUTE RATINGS(LIMITING VALUES)

Symbols	Parameters	Value				Units	
		DB3	DC34	DB4	DB6		
P <sub>c</sub>	Power Dissipation on Printed Circuit(L=10mm)	TA=50°C			150		mW
I <sub>TRM</sub>	Repetitive Peak in-state Current	tp=10μs F=100Hz	2.0	2.0	2.0	1.6	A
T <sub>STG/TJ</sub>	Storage and Operating Junction Temperature	-40 to +125/-40 to 110			°C		

## ELECTRICAL CHARACTERISTICS

Symbols	Parameters	Test Conditions	Value				Units	
			DB3	DC34	DB4	DB6		
V <sub>BO</sub>	Breakover Voltage(Note 2)	c=22nF(Note 2)	Min	28	30	35	56	V
		See diagram1	Typ	32	34	40	60	
			Max	36	38	45	70	
+V <sub>BO</sub>  - V <sub>BO</sub>  -	Breakover Voltage Symmetry	c=22nF(Note 2) See diagram1	Max	± 3		± 4	V	
V <sub>BO</sub> Δ V	Dynamic Breakover Voltage(Note 1)	Δ I=(I <sub>BO</sub> to I <sub>F</sub> =10mA) See diagram1	Min	5		10	V	
V <sub>O</sub>	Output Voltage(Note 1)	See diagram2	Min	5			V	
I <sub>BO</sub>	Breakover Current(Note 1)	c=22nF(Note 2)	Max	100			μA	
t <sub>r</sub>	Rise Time(Note 1)	See Diagram 3	Typ	1.5			μS	
I <sub>B</sub>	Leakage Current(Note 1)	V <sub>B</sub> =0.5 V <sub>BO</sub> max see diagram 1	Max	10			μA	

Notes: 1. Electrical characteristics applicable in both forward and reverse directions.

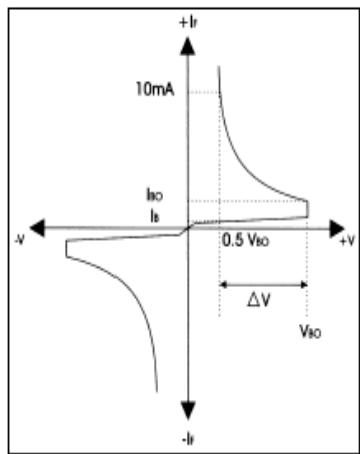
2. Connected in parallel with the devices.

# DB3/DC34/DB4/DB6

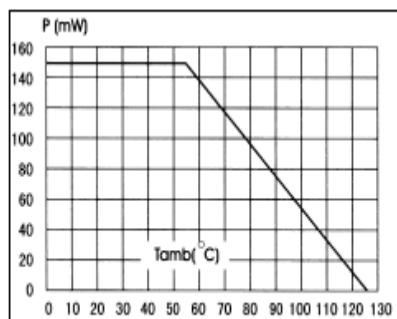


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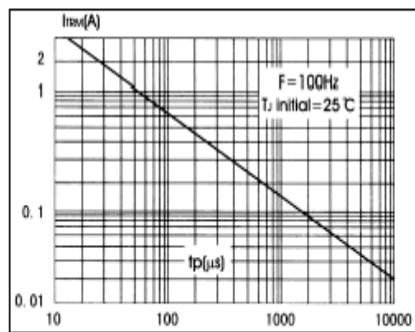
**DIAGRAM 1: Current-voltage characteristics**



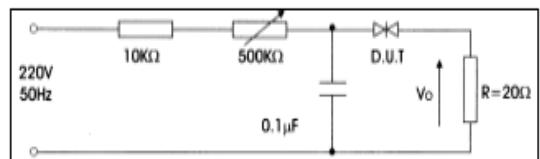
**FIG.1-Power dissipation versus ambient temperature(maximum values)**



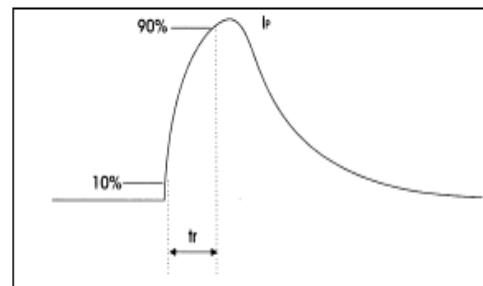
**FIG.3-Peak pulse current versus pulse duration (maximum values)**



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



**DIAGRAM 3: Test circuit see diagram2 adjust R for  $I_p=0.5\text{A}$**



**FIG.2-Relative variation of VBO versus juntion temperature(typical values)**

