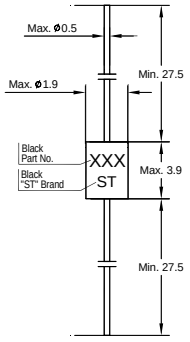
DB3, DB4, DC34

SILICON BIDIRECTIONAL DIACS

The glass passivated, 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. These diacs are intended for use in thyristor phase control, circuits for lamp-dimming, universal-motor speed controls, and heat controls.



Glass Case DO-35
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation (T_a = 65 °C)	P_{tot}	150	mW
Repetitive Peak On-state Current (tp = 20 µs, f = 100 Hz)	I_{TRM}	2	A
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 40 to + 125	°C

Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Max.	Unit
Breakover Voltage	DB3	$V_{(BR)1}$ and $V_{(BR)2}$	28	36	V
	DC34		30	38	
	DB4		35	45	
Breakover Currents		$I_{(BR)1}$ and $I_{(BR)2}$	-	200	µA
Breakover Voltage Symmetry		$[V_{(BR)1}]$-$[V_{(BR)2}]$	-	3.8	V
Dynamic Breakover Voltage $\Delta I = [I_{BR}$ to $I_F = 10$ mA]		$\mid \Delta V \pm \mid$	5	-	V

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

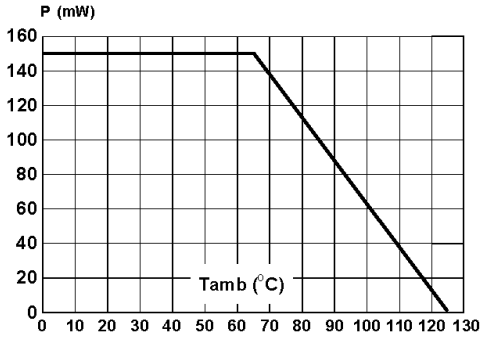


Fig.2 : Relative variation of V_{BO} versus junction temperature (typical values)

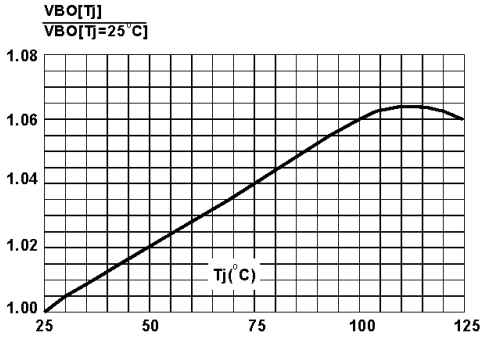


Fig.3 : Peak pulse current versus pulse duration (maximum values)