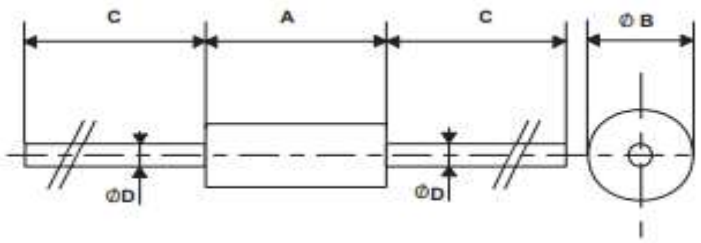
Features

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, SD34, DB4) or four volts(DB6). These diacs are intended for use in thyrisitors phase control, circuits for lamp dimming, universal motor speed control, and heat control.

SH's DB3, SD34, DB4, DB6 are bi-directional trigged diode designed to operate in conjunction with Triacs and SCR's

DO-35(Glass)



REF.	DIMENSIONS			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.05	4.50	0.120	0.177
B	1.53	2.00	0.060	0.079
C	28.00		1.102	
D	0.458	0.558	0.018	0.022

Maximum Ratings

Parameter		Symbol	DB3	SD34	DB4	DB6	Unit	Remark
Maximum Power Dissipation on Printed Circuit	T_A=50℃	P_C	150				mW	L=10mm
Maximum Repetitive Peak on-state Current	tp=10us, F=100Hz	I_{TRM}	2	2	2	16	A	
Maximum Operating Junction Temperature		T_J	-40 to +125				℃	
Maximum Storage Temperature		T_{STG}	-40 to +125				℃	

Electrical Characteristics

Parameters	Test Conditions		Symbol	DB3	SD34	DB4	DB6	Unit	Remark
Breakover Voltage	C=22nF See Diagram 1	Min	V_{BO}	28	30	35	56	V	Note 2
		Typ		32	34	40	60		
		Max		36	38	45	70		
Breakover Voltage Symmetry	C=22nF See Diagram 1	Max	$\lvert +V_{BO} \rvert - \lvert -V_{BO} \rvert$	±3			±4	V	Note 2
Dynamic Breakover Voltage	△I=(I_{BO} to I_F=10mA) See Diagram 1	Min	$\lvert \pm\triangle V \rvert$	5			10	V	Note 1
Output Voltage	See Diagram 2	Min	V_O	5				V	Note 1
Breakover Current	C=22nF	Max	I_{BO}	100				uA	Note 2
Rise Time	See Diagram 3	Typ	tr	15				uS	Note 1
Leakage Current	V_B=0.5 V_{BO} Max See Diagram 1	Max	I_B	10				uA	Note 1

Note 1. Electrical characteristics applicable in both forward and reverse directions
Note 2. Connected in parallel with the devices.

Ratings and Characteristics Curves (Ta=25℃ unless otherwise noted)

Diagram 1 : Voltage-Current Characteristic Curve.

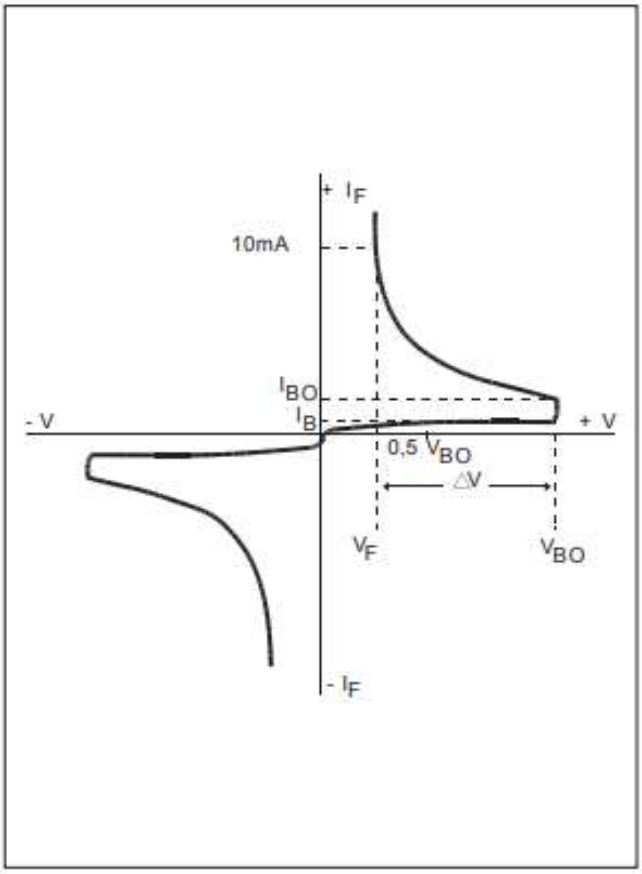


Diagram 2 : Test Circuit.

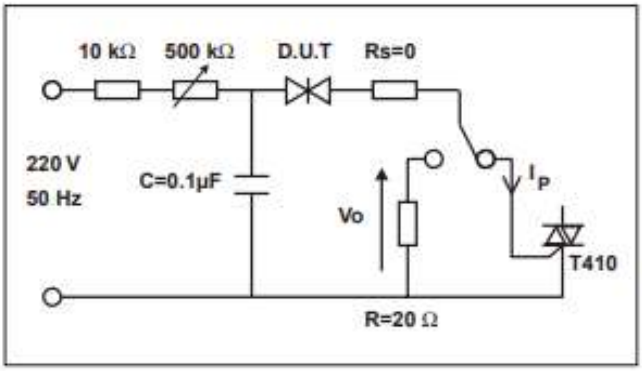
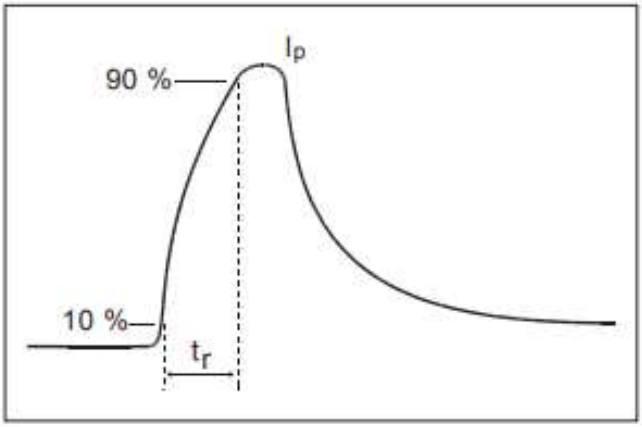


Diagram 3 : Rise Time Measurement.



Ratings and Characteristics Curves (Ta=25℃ unless otherwise noted)

Fig.1 Power Dissipation Versus Ambient Temperatu

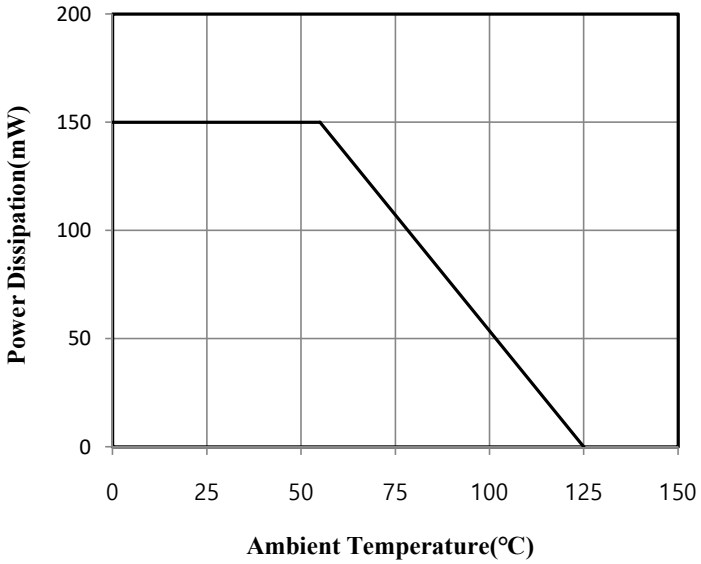


Fig.2 Relative variation of V_{BO} Versus Junction Temperature(Typical Values)

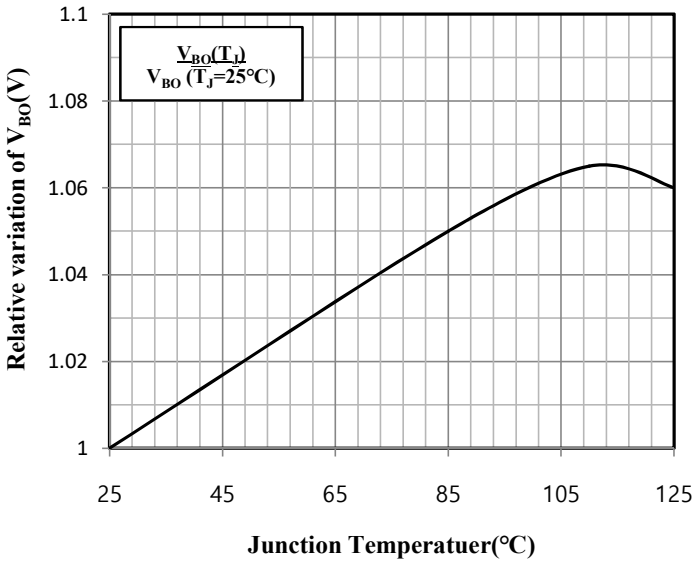


Fig.3 Peak Pulse Current Versus Pulse Duration (Maximum Values)