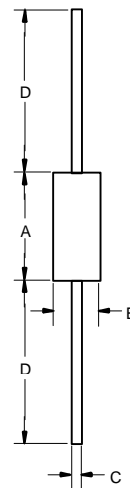


DB3/DC34 AND DB4/DB6

SILICON BIDIRECTIONAL DIAC

DO-35G



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 thyristors phase control , circuits for lamp dimming, universal motor speed control ,and heat control.

Maximum Ratings

- Operating Temperature: -40°C to +110°C
- Storage Temperature: -40°C to +125°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Power dissipation on Printed Circuit(l=10mm)	P_C	150mW	$T_A=50^\circ\text{C}$
Repetitive Peak on-state Current DB3,DC34,DB4 DB6	I_{TRM}	2.0A 16A	$t_p=10\mu\text{s}, f=100\text{Hz}$
Breakover Voltage DB3 DC34 DB4 DB6	V_{BO}	Min Typ Max 28 32 36V 30 34 38V 35 40 45V 56 60 70V	C=22nF(Note 2)
Breakover Voltage Symmetry DB3, DC34, DB4 DB6	$ +V_{BO} $ $ -V_{BO} $	$\pm 3\text{V}$ $\pm 4\text{V}$	C=22nF(Note 2)
Output Voltage(Note 1)	$V_{o(\text{min})}$	5V	
Breakover Current(Note 1)	$I_{BO(\text{max})}$	100uA	C=22nF
Rise Time(Note 1)	T_r	1.5us	
Leakage Current(Note 1)	$I_{B(\text{max})}$	10uA	$V_B=0.5V_{BO(\text{max})}$

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

2.Connected in parallel with the devices.

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.150	---	3.8	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.083	---	27.50	---	

RATINGS AND CHARACTERISTIC CURVES DB3/DC34/DB4/DB6

DIAGRAM 1: Current-voltage characteristics

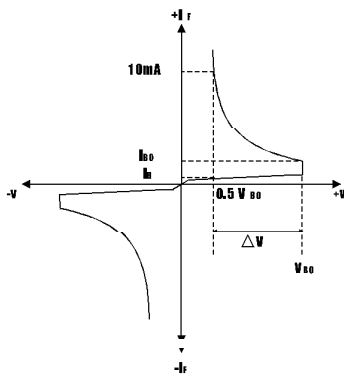


FIG.1-Power dissipation versus ambient temperature (maximum values)

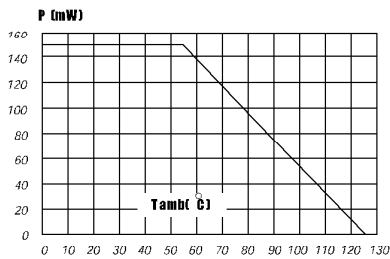


FIG.3-Peak pulse current versus pulse duration (maximum values)

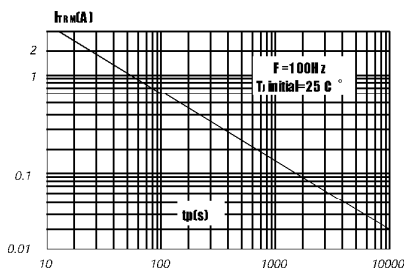


DIAGRAM 2: Test circuit for output voltage

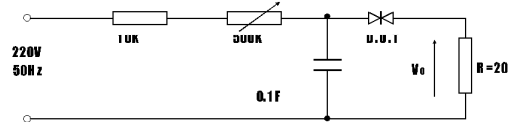


DIAGRAM 3: Test circuit see diagram2 adjust R for $I=0.5\text{A}$

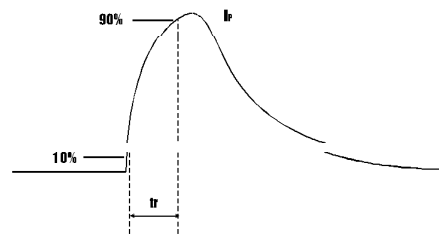


FIG.2-Relative variation of V_{BO} versus junction temperature (typical values)

