WEJ®

RoHS

DB3-DB6

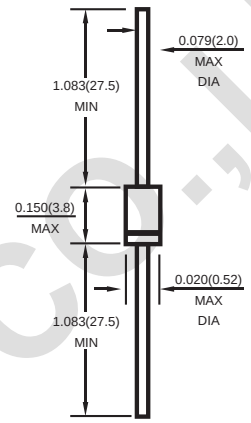
SILICON BIDIRECTIONAL DIAC

FEATURE

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

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

DO-35(GLASS)



Dimensions in inches and (millimeters)

ABSOLUTE RATINGS(LIMITING VALUES)

Symbols	Parameters		Value				Units
			DB3	DC34	DB4	DB6	
P_C	Power Dissipation on printed Circuit(L=10mm)	T_A= 50 °C	150				mW
I_{TRM}	Repetitive peak on-state Current	tp=10μs F=100Hz	2.0	2.0	2.0	16	A
T_{STG}/T_J	Storage and Operating Junction Temperature		-40 to+125/-40 to 110				°C

ELECTRICAL CHARACTERISTICS

Symbols	Parameters	Test Conditions		Value				Units
V_{BO}	Breakover Voltage(Note2)	C=22nF(Note2) See diagram 1	Min	28	30	35	56	V
			Typ	32	34	40	60	
			Max	36	38	45	70	
I + V_{BO} I- I - V_{BO} I	Breakover Voltage Symmetry	C=22nF(Note2) See diagram 1	Max	±3			±4	V
I + △V I	Dynamic Breakover Voltage(Note 1)	△I=(Iso to IF=10mA) See Diagram 1	Min	5			10	V
V_O	Output Voltage (Note 1)	See Diagram 2	Min	5				V
I_{BO}	Breakwver Current(Note 1)	C=22nF(Note2)	Max	100				μA
tr	Rise Time (Note1)	See Diagram 3	Tip	1.5				μS
I_B	Leakage Current(Note1)	V_B=0.5V_{BO} max see diagrom1	Max	10				μA

Notes:1.Electrical characteristics applicable in both forward and reverse direclions.
2.Connected in parallel with the devices.

DIAGRAM1:Current-voltage characteristics

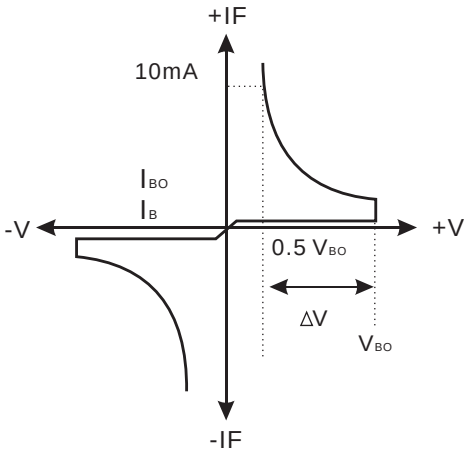


DIAGRAM2 : Test circuit for output voltage

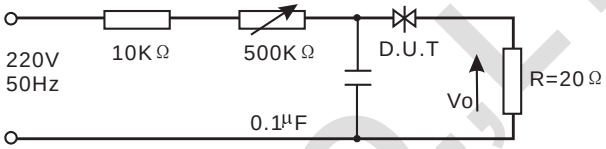


DIAGRAM3 : Test circuit see diagram2 adjust Rfor IP=0.5A

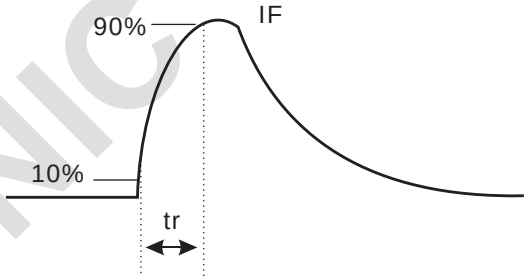


FIG.1-Power dissipation versus ambient temperature (maximum values)

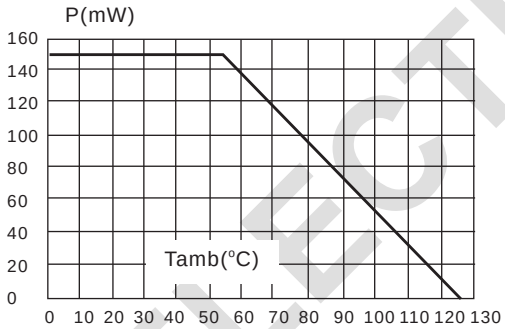


FIG.2-Relative variation of VBO versus junction temperature (typical values)

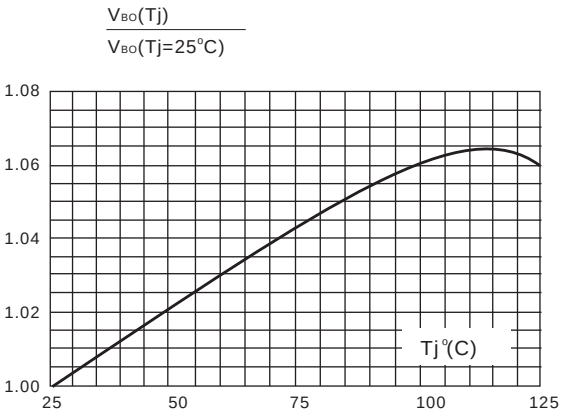


FIG.3-Peak pulse current versus pulse duration (maximum values)