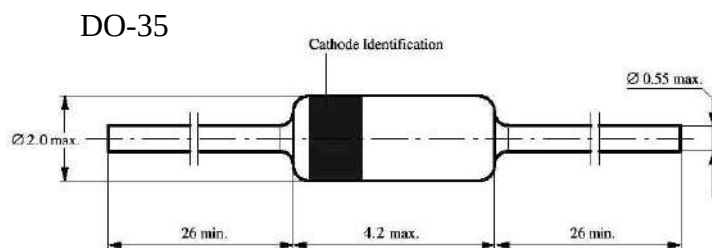


SILICON BIDIRECTIONAL DIACS

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(MH3,MHB4). These diacs are intended for use in thyristors phase control,circuits for lamp dimming, universal motor speed control,and heat control



Dimensions in millimeters

ABSOLUTE RATINGS

Parameters	Symbols	DB3,DB4	UNITS
Power dissipation on printed TA=50°C circuit (L=10mm)	Pc	150.0	mW
Repetitive peak on-state tp=20 μS current f=120Hz	ITRM	2.0	A
Operating junction temperature	TJ	-40--- +125	oC
Storage temperature	TSTG	-40--- +125	oC

ELECTRICAL CHARACTERISTICS

Parameters		Test Conditions		DB3	DB4	UNITS
Breakover voltage (NOTE 1)	VBO	C=22nf(NOTE 2) See FIG.1	Min	28	35	V
			Typ	32	40	
			Max	36	45	
Breakover voltage symmetry	I+VBO I-I-VBOI	C=22nf(NOTE 2) See FIG.1	Max	±3.0		V
Dynamic breakover voltage (NOTE 1)	I± VI	I=(IBO to IF=10mA) See FIG.1	Min	5.0		V
Output voltage (NOTE 1)	Vo	See FIG.2	Min	5.0		V
Breakover current (NOTE 1)	IBO	C=22nf(NOTE 2)	Max	100.0		μA
Rise time (NOTE 1)	tr	See FIG.3	Typ	1.5		μS
Leakage current (NOTE 1)	IR	VR=0.5 VBO See FIG.1	Max	10.0		μA

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

FIG.1-VOLTAGE-CURRENT CHARACTERISTIC CURVE

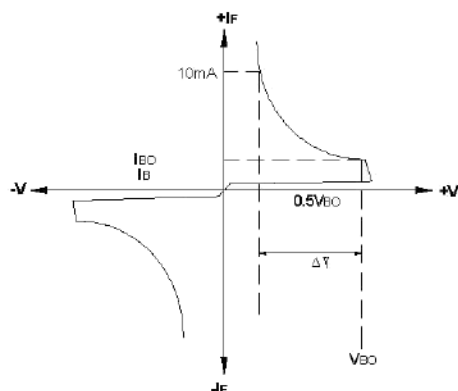


FIG.2-TEST CIRCUIT FOR OUTPUT VOLTAGE

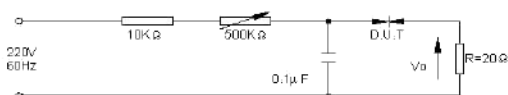


FIG.3- TEST CIRCUIT SEE FIG.2 ADJUST R FOR $I_P=0.5A$

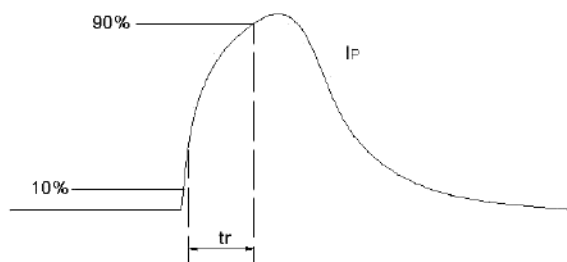


FIG.4-POWER DISSIPATION VERSUS AMBIENT TEMPERATURE MAXIMUM VALUES

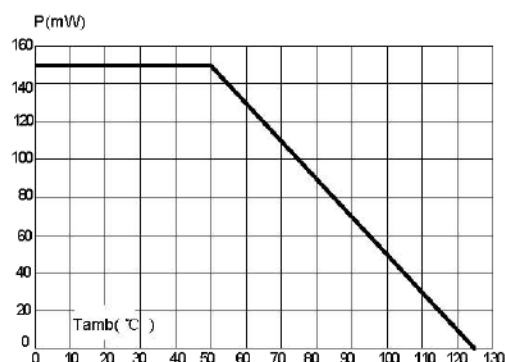


FIG.5-RELATIVE VARIATION OF V_{BO} VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

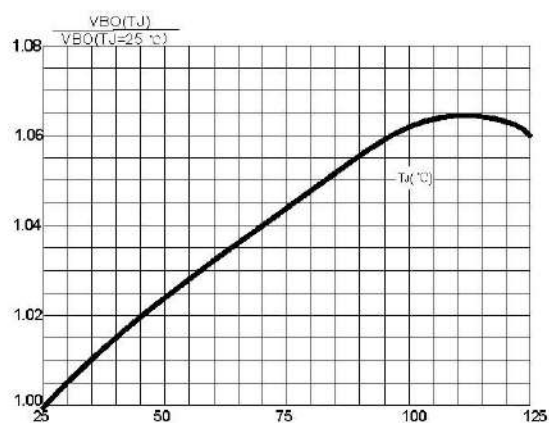


FIG.6-PEAK PULSEE CURRENT VERENT VERSUS PULSE DURATION(MAXIMUM VALUES)

