DB3 / DB4 / DC34

Trigger Diodes

Features

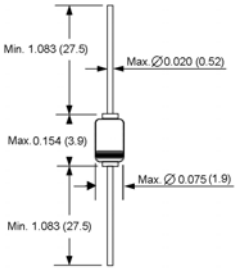
- V_{BO}: 32V / 34V / 40V Versions
- Low Breakover Current

Description

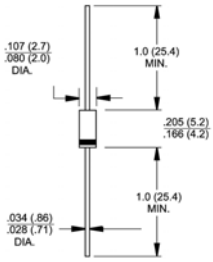
- High reliability glass passivation insuring parameter stability and protection against junction contamination.

DO-204AH (DO-35 Glass)

DO-204AL (DO-41)



Dimensions in inches and (millimeters)



Dimensions in inches and (millimeters)

Note: Suffix: "-P" to order Molded Plastic Package
Suffix: "-G" to order Molded Glass Package

Absolute Ratings (limiting values)

Symbols	Parameters		Value	Units
P	Power dissipation on printed circuit (L = 10 mm)	T_A=65°C	150	mW
I_{TRM}	Repetitive peak on-state current	tp=20us F=100 Hz	2.0	Amps
T_J, T_{STG}	Storage and operating junction temperature range		-40 to +125 -40 to +125	°C °C

Thermal Resistances

Symbols	Parameters	Value	Units
$R_{th(j-a)}$	Junction to ambient	400	°C/W
$R_{th(j-l)}$	Junction-leads	150	°C/W

Electrical Characteristics (T_j=25°C)

Symbols	Parameters	Test Conditions		Value			Units
				DB3	DC34	DB4	
V_{BO}	Breakover voltage *	C=22 nF ** see diagram 1	MIN.	28	30	35	Volts
			TYP.	32	34	40	
			MAX.	36	38	45	
$[I+V_{BO}I-I-V_{BO}I]$	Breakover voltage symmetry	C=22 nF ** see diagram 1	MAX.	3			Volts
$I\Delta V\pm I$	Dynamic breakover voltage *	$\Delta I = [I_{BO}$ to I_F=10mA] see diagram 1	MIN.	5			Volts
V_O	Output voltage *	see diagram 2	MIN.	5			Volts
I_{BO}	Breakover current *	C=22 nF **	MAX.	100	50	100	uA
tr	Rise time *	see diagram 3	TYP.	1.5			uS
I_B	Leakage current *	V_B=0.5V_{BO} max see diagram 1	MAX.	10			uA

* Electrical characteristic applicable in both forward and reverse directions.

** Connected in parallel with the devices.

DIAGRAM 1 : Current-voltage characteristics

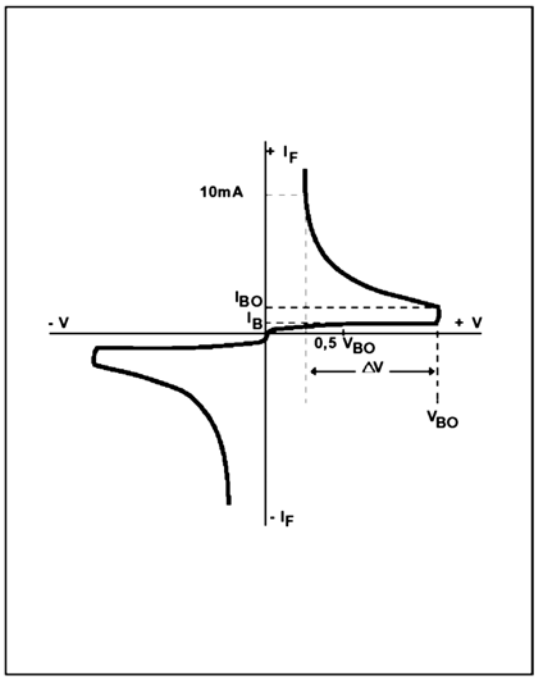


DIAGRAM 2 : Test circuit for output voltage

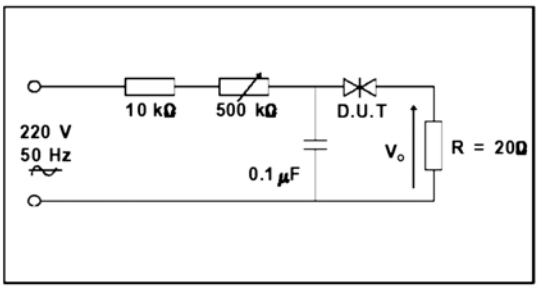


DIAGRAM 3 : Test circuit see diagram 2.
Adjust R for Ip=0.5A

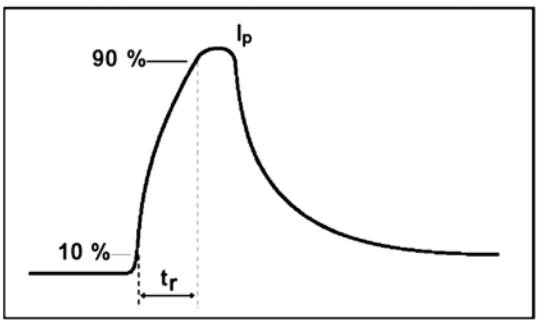


Fig.1 : Power dissipation versus ambient temperature (maximum values)

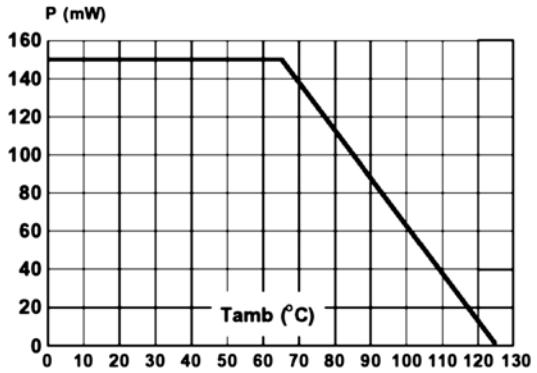


Fig.2 : Relative variation of V_{BO} versus junction temperature (typical values)

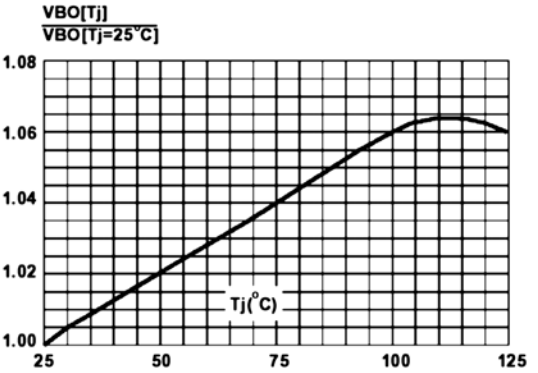


Fig.3 : Peak pulse current versus pulse duration (maximum values)