



Features

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

Description

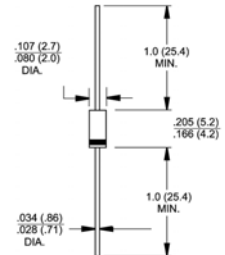
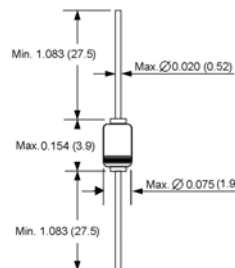
- ◆ High reliability glass passivation insuring parameter stability and protection against junction contamination.



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)	$T_A = 65^\circ\text{C}$	150	mW
I_{TRM}	Repetitive peak on-state current	$t_p = 20\mu\text{s}$ $F = 100\text{ Hz}$	2.0	Amps
T_J, T_{STG}	Storage and operating junction temperature range		-40 to +125 -40 to +125	$^\circ\text{C}$ $^\circ\text{C}$

Thermal Resistances

Symbols	Parameters	Value	Units
$R_{\theta(j-a)}$	Junction to ambient	400	$^\circ\text{C/W}$
$R_{\theta(j-l)}$	Junction-leads	150	$^\circ\text{C/W}$

Electrical Characteristics ($T_j=25^\circ\text{C}$)

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	
$[+V_{BO}, -I_{-V_{BO}}]$	Breakover voltage symmetry	C=22 nF ** see diagram 1	MAX.	3			Volts
$ \Delta V_{\pm} $	Dynamic breakover voltage *	$\Delta I = [I_{BO} \text{ to } I_F=10\text{mA}]$ 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	μA
t_r	Rise time *	see diagram 3	TYP.	1.5			μs
I_B	Leakage current *	$V_o=0.5V_{BO}$ max see diagram 1	MAX.	10			μA

* Electrical characteristic applicable in both forward and reverse directions.

** Connected in parallel with the devices.

DIAGRAM 1 : Current-voltage characteristics

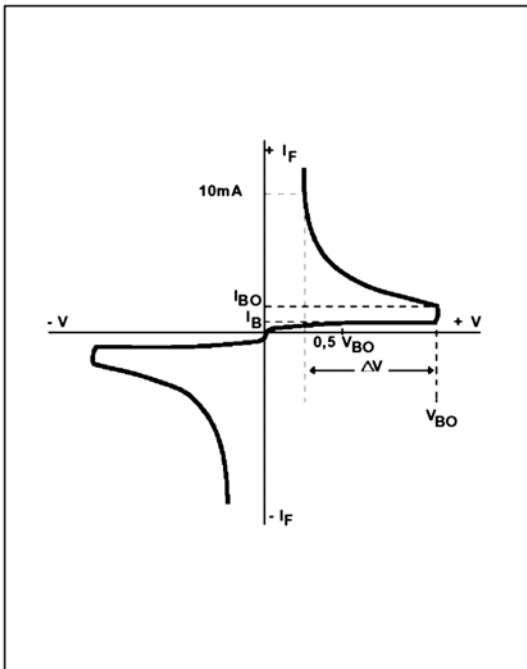
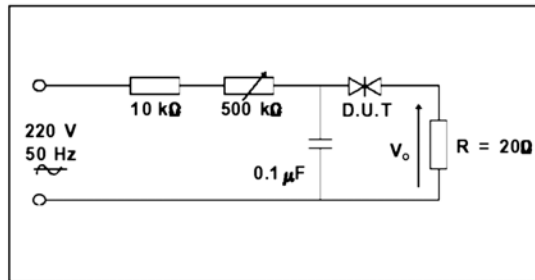


DIAGRAM 2 : Test circuit for output voltage



**DIAGRAM 3 : Test circuit see diagram 2.
Adjust R for $I_p=0.5\text{A}$**

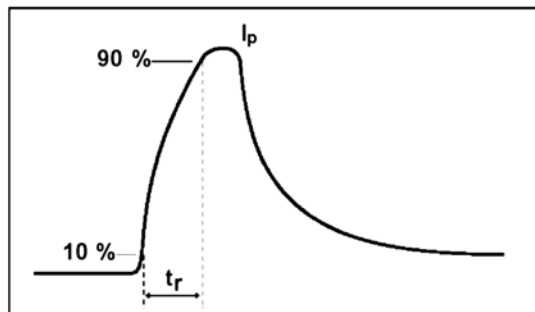


Fig.1 : Power dissipation versus ambient temperature (maximum values)

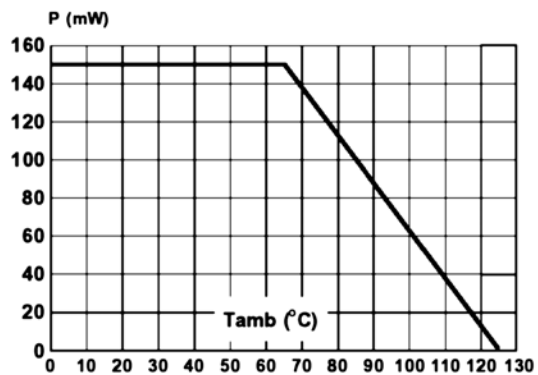


Fig.2 : Relative variation of V_{BO} versus junction temperature (typical values)

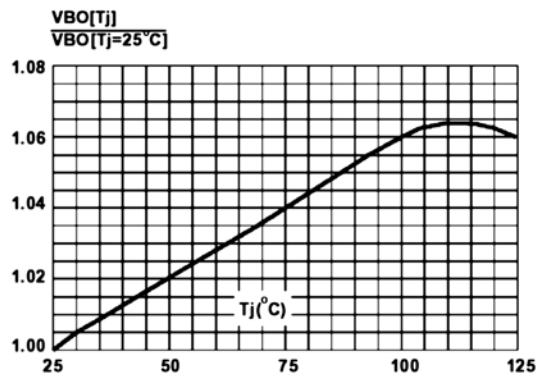


Fig.3 : Peak pulse current versus pulse duration (maximum values)

