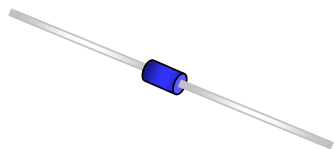
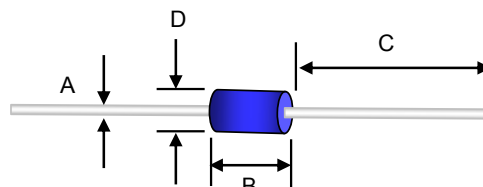


Small Signal Diode



DO-35 Axial Lead HERMETICALLY SEALED GLASS



Features

- ✧ Designed for through-Hole Device Type Mounting.
- ✧ Hermetically Sealed Glass.
- ✧ All external surface are corrosion resistant and terminals are readily solderable.
- ✧ High reliability glass passivation insuring parameter stability and protection against junction contamination.
- ✧ Pb free version and RoHS compliant

Mechanical Data

- ✧ Case :DO-35 Solder Hot Dip Tin (Sn) lead finish
- ✧ Terminal: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ✧ High temperature soldering guaranteed: 260°C/10s
- ✧ Marking : DB3/DB3TG
- ✧ Weight : 0.1255 gram (approximately)

Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	0.45	0.55	0.018	0.022
B	3.05	4.00	0.120	0.157
C	25.4	38.1	1.000	1.500
D	1.53	2.28	0.060	0.090

Ordering Information

Package	Part No.	Packing	Marking
DO-35	DB3 RI	5K / 10" Reel	DB3
DO-35	DB3TG RI	5K / 10" Reel	DB3TG

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	Value	Units
Power Dissipation	P_D	150	mW
Repetitive Peak Forward Current Pulse Width= 20μsec	I_{FRM}	2	A
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	400	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-40 to + 125	°C

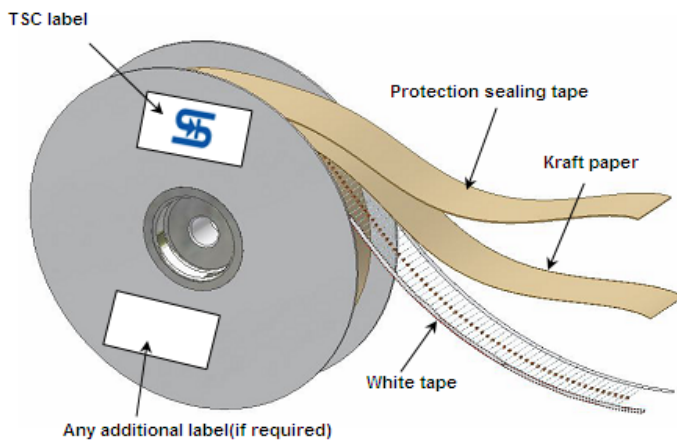
Notes:1. Valid provided that electrodes are kept at ambient temperature

Small Signal Diode

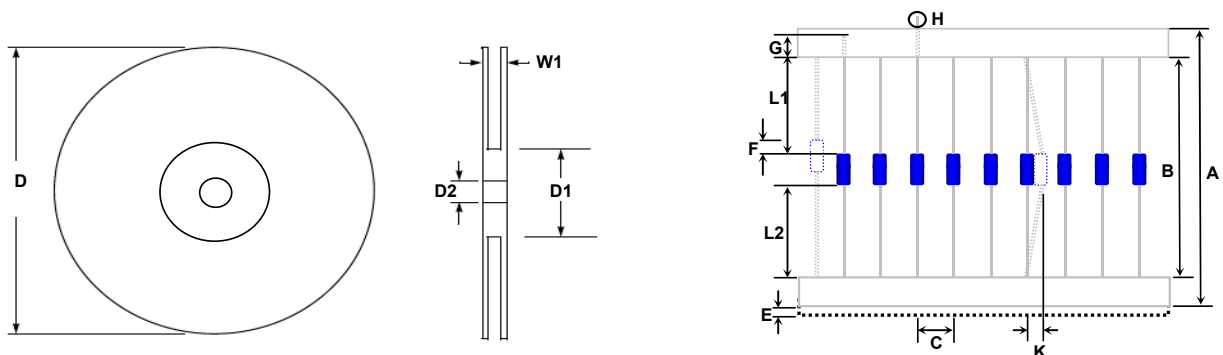
Electrical Characteristics

Type Number		Symbol	DB3	DB3TG	Units
Break-over Voltage	C= 22nF	V_{BO}	Min.	28	V
			Typ.	32	
			Max.	36	
Break-over Voltage Symmetry	C= 22nF	$+/-V_{BO}$	Max.	$+/-3$	V
Break-over Current	C= 22nF	I_{BO}	Max.	100	μA
Dynamic Breakover Voltage	I_{BO} to $I_F=10mA$	ΔV	Min.	5	V
Leakage Current	$V_B= 0.5V_{BO}$ (MAX)	I_B	Max.	10	μA
Output Voltage	*see diagram 1	V_O	Min.	5	V

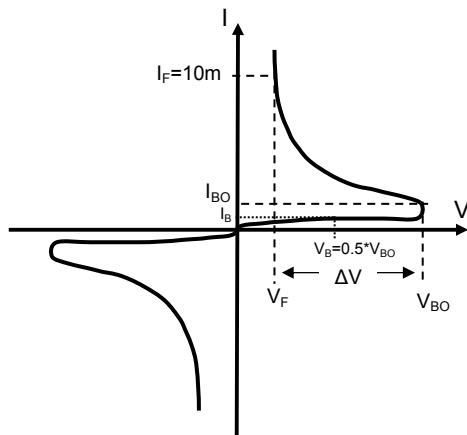
Tape & Reel specification



Item	Symbol	Dimension(mm)
Overall width	A	64+1.69/-0.69
Tape spacing	B	52.0+/-0.69
Component Pitch	C	5.08+/-0.40
Untaped lead	L1-L2	+/-0.69
Bent	K	1.2 Max
Tape Mismatch	E	0.55(MAX)
Glass offset	F	0.69(MAX)
Taped lead	G	3.2Min
lead beyond tape	H	0
Reel outside diameter	D	260+/-3
Reel inner diameter	D1	48+/-1
Feed hole width	D2	20+/-0.5
Reel width	W1	72+3/-1



Rating and Characteristic Curves



V_{BO} : Break-Over Voltage
 I_{BO} : Break-Over Current
 ΔV : Dynamic Breakover Voltage
 I_B : Leakage Current at $V_B = 0.5 * V_{BO}$
 V_F : Voltage at Current $I_F = 10mA$

Diagram 1: Test Circuit

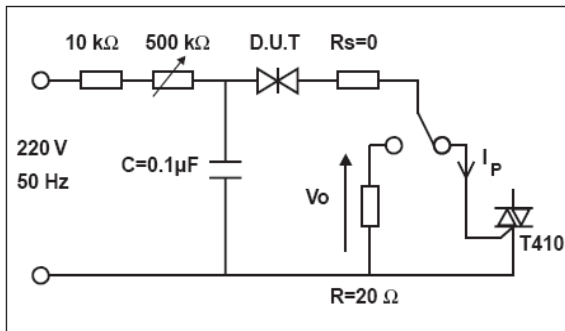


FIG 1 Admissible Power Dissipation Curve

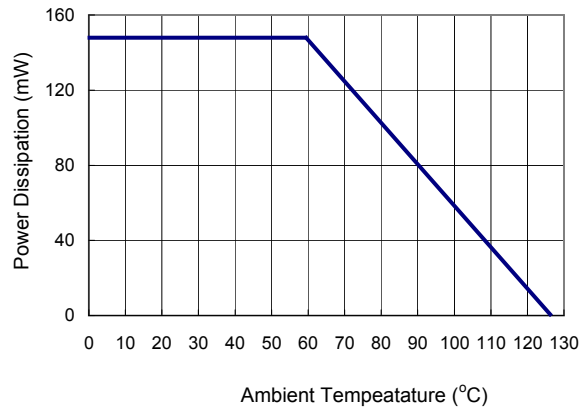


FIG 2 Relative variation of VBO versus junction temperature (typical values)

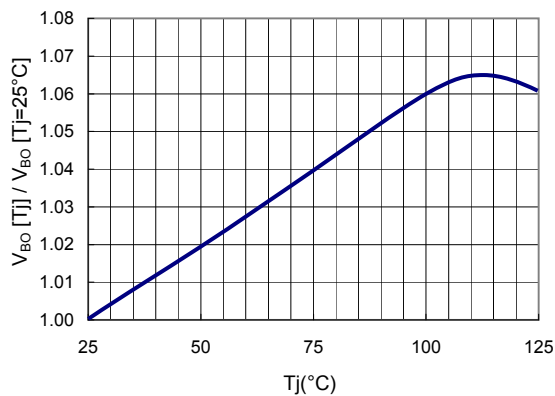


FIG 3 Repetitive peak pulse current versus pulse duration (maximum values)

