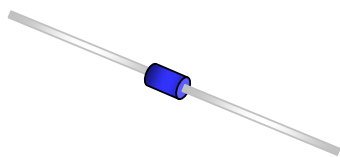


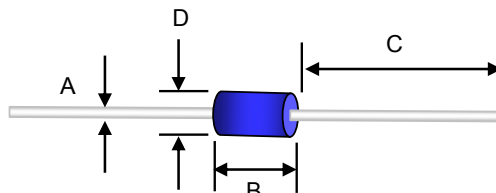
### Small Signal Diode



**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	5.08	0.120	0.200
C	25.4	38.1	1.000	1.500
D	1.53	2.28	0.060	0.090

### Ordering Information

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

### 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

#### Electrical Characteristics

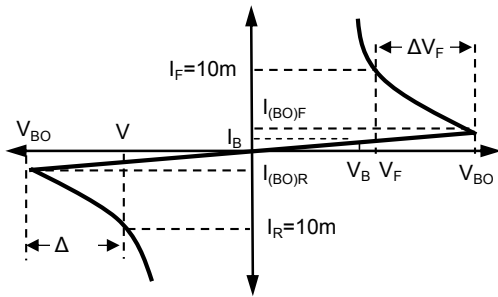
Type Number	Symbol	DB3	DB3TG	Units
Break-over Voltage C= 22nF	$V_{BO}$	32	32	V
Break-over Voltage Symmetry C= 22nF	+ / - $V_{BO}$	+ / - 3	+ / - 2	V
Break-over Current C= 22nF	$I_{BO}$	100	15	nA
Maxiumn Leakage Current $V_R=0.5V$	$I_R$	10		μA
Junction Capacitance $V_R=0, f=1.0MHz$	$C_J$	22.0		nF
Output Voltage	$V_O$	5		V
Reverse Recovery Time (Note2)	$T_{rr}$	1.5		μs

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

Notes:2. Test Condition :  $I_F=0.5A, R_L=100\Omega$

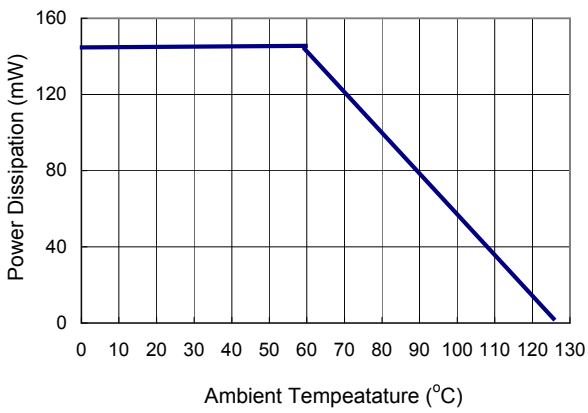
**Small Signal Diode**

**Rating and Sharacteristic Curves**

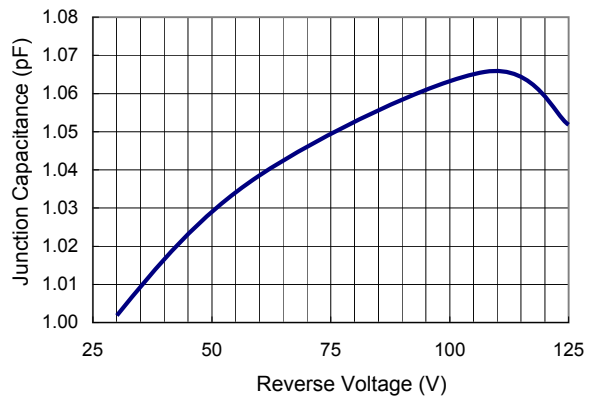


- $V_{BO}$  : Break-Over Voltage at  $I_{BO}$
- $I_{BO}$  : Test current for voltage  $V_{BO}$
- $V_F$  : Dynamic impedance at  $I_F$
- $I_B$  : Test current for voltage  $V_B$
- $V_B$  : Voltage at current  $I_B$
- $I_B$  : Test current for voltage  $V_B$

**FIG 1 Admissible Power Dissipation Curve**



**FIG 2 Typical Junction Capacitance**



**FIG 3 Peak pulse current versus duration**

