

## Small Signal Product

## High Voltage Switching Diode

**FEATURES**

- Fast switching device ( $t_{rr} < 4.0\text{ns}$ )
- Through-hole device type mounting
- Hermetically sealed glass
- Solder hot dip tin (Sn) lead finish
- All external surfaces are corrosion resistant and leads are readily solderable
- Packing code with suffix "G" means Halogen free


**DO-35**

**MECHANICAL DATA**

- Case: DO-35 package
- High temperature soldering guaranteed:  $260^{\circ}\text{C}/10\text{s}$
- Polarity: Indicated by black cathode band
- Weight:  $109 \pm 4\text{ mg}$

Hermetically Sealed Glass

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_A = 25^{\circ}\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	$P_D$	500	mW
Peak Forward Surge Current	$I_{FSM}$	1 4	A
Average Forward Current	$I_O$	200	mA
Thermal Resistance (Junction to Ambient)	$R_{\theta JA}$	300	$^{\circ}\text{C}/\text{W}$
Junction and Storage Temperature Range	$T_J, T_{STG}$	-65 to +200	$^{\circ}\text{C}$

PARAMETER	SYMBOL	MIN	MAX	UNIT
Reverse Breakdown Voltage	BAV19	120	-	V
	BAV20	200	-	
	BAV21	250	-	
Forward Voltage	$I_F = 100\text{ mA}$	-	1.00	V
	$I_F = 200\text{ mA}$	-	1.25	
Reverse Leakage Current	BAV19	-	100	nA
	BAV20	-	100	
	BAV21	-	100	
Junction Capacitance	$C_J$	-	5	pF
Reverse Recovery Time	$t_{rr}$	-	50	ns

 Note 1: Test condition :  $I_F = I_R = 30\text{mA}$  ,  $R_L = 100\Omega$  ,  $I_{RR} = 3\text{mA}$

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RATINGS AND CHARACTERISTICS CURVES

( $T_A=25^\circ\text{C}$  unless otherwise noted)

Fig. 1 Reverse Voltage VS. Reverse Current

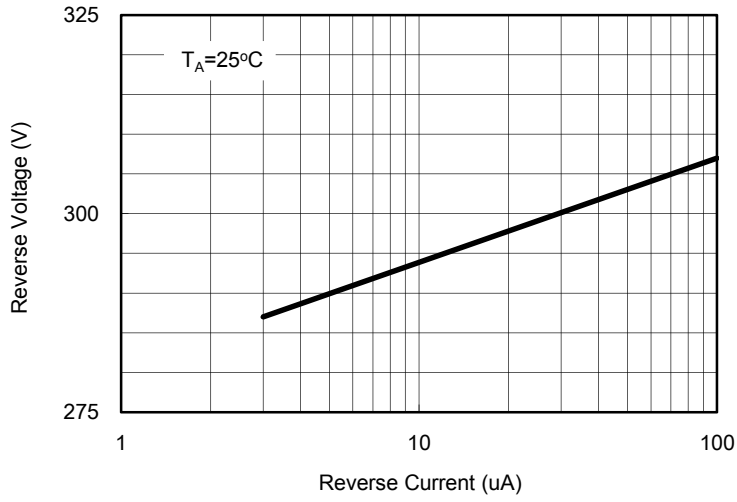


Fig. 2 Reverse Current VS. Reverse Voltage

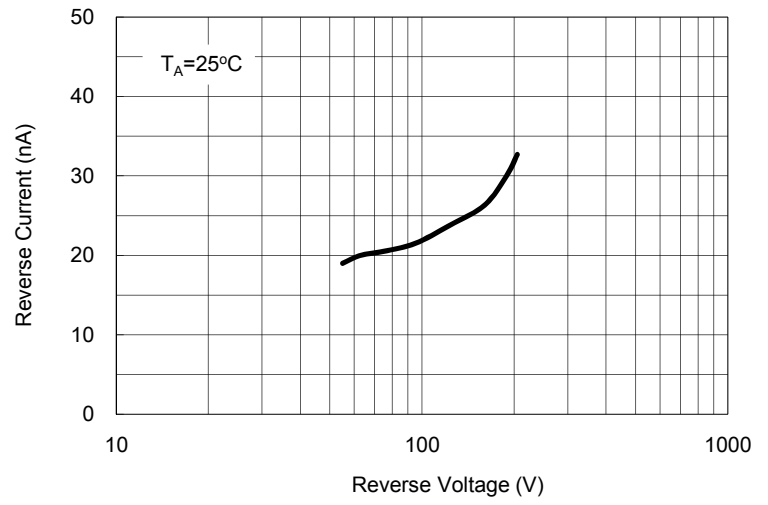


Fig. 3 Reverse Current VS. Reverse Voltage

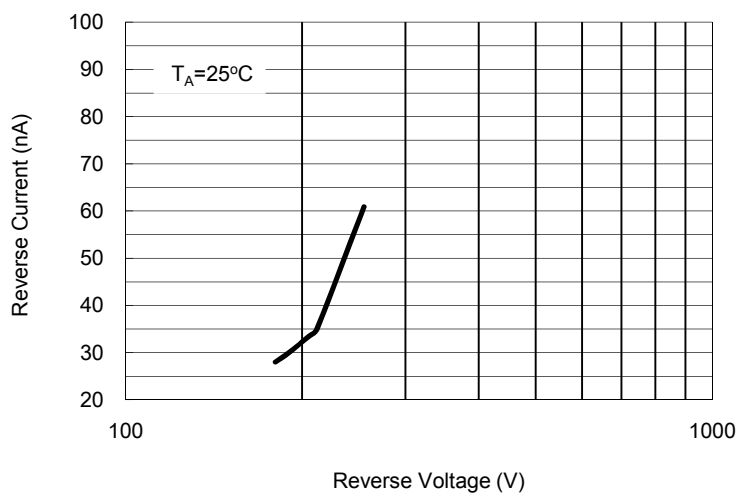


Fig. 4 Forward Voltage VS. Forward Current

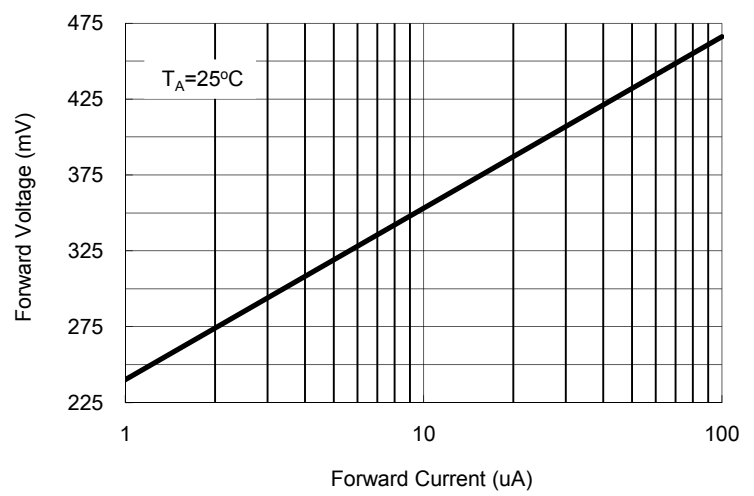


Fig. 5 Forward Volatage VS. Forward Current

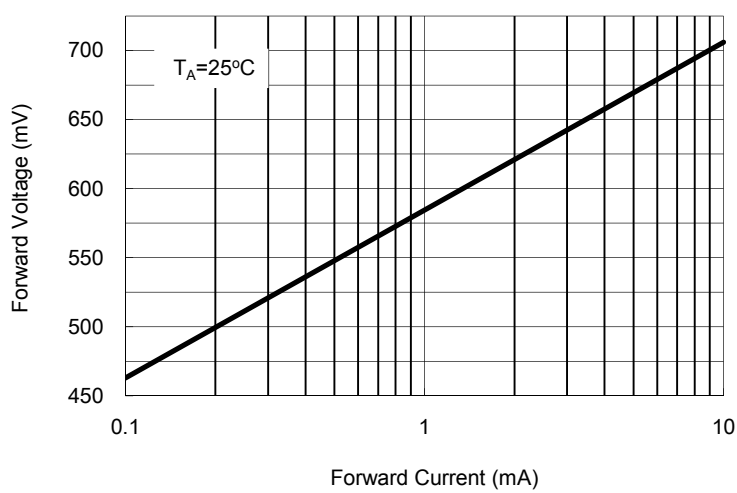
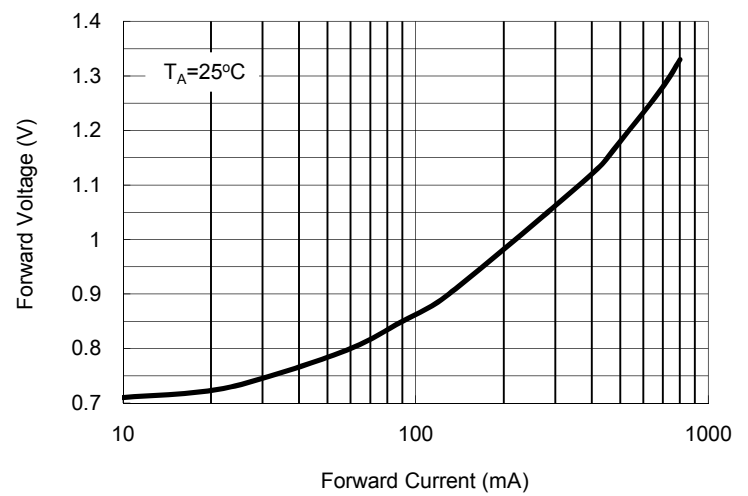


Fig. 6 Forward Volatage VS. Forward Current



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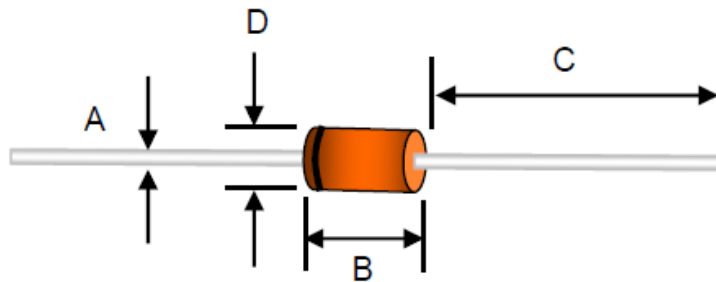
ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX (Note 2)	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
BAVxx (Note1)	-xx	R0	G	DO-35	10K / 14" Reel
		A0			5K / Box ( Ammo)

Note 1: "x" is Device Code from "19" thru "21".

Note 2: Part No. Suffix „-xx “ would be used for special requirement

EXAMPLE					
PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
BAV19 R0G	BAV19		R0	G	Multiple manufacture source Halogen free
BAV19-L0 R0G	BAV19	-L0	R0	G	Define manufacture source Halogen free

PACKAGE OUTLINE DIMENSION



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	0.34	0.60	0.013	0.024
B	2.90	5.08	0.114	0.200
C	25.40	38.10	1.000	1.500
D	1.30	2.28	0.051	0.090

MARKING DIAGRAM



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