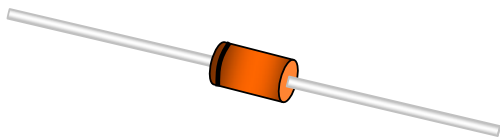


Small Signal Diode



Features

- ✧ Fast switching device ($T_{rr} < 4.0\text{ns}$)
- ✧ Through-hole device type mounting
- ✧ Solder hot dip Tin(Sn) lead finish
- ✧ Pb free version and RoHS compliant
- ✧ All External Surfaces are Corrosion Resistant and Leads are Readily Solderable

Mechanical Data

- ✧ Case : : DO-35 package (SOD-27)
- ✧ High temperature soldering guaranteed : $260^{\circ}\text{C}/10\text{s}$
- ✧ Polarity : Indicated by cathode band
- ✧ Weight : $109 \pm 4\text{ mg}$

Ordering Information

Package	Part No.	Packing
DO-35	BAV19 A0	5K / Ammo
DO-35	BAV20 A0	5K / Ammo
DO-35	BAV21A0	5K / Ammo
DO-35	BAV19 R0	10K / 14" Reel
DO-35	BAV20 R0	10K / 14" Reel
DO-35	BAV21 R0	10K / 14" Reel

Maximum Ratings and Electrical Characteristics

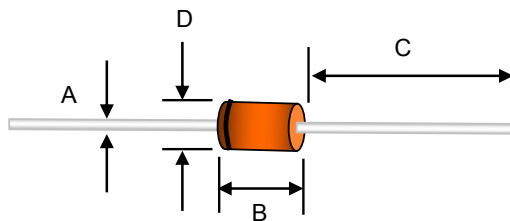
Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	Value	Units
Power Dissipation	P_D	500	mW
Peak Forward Surge Current Pulse Width = 1S, Square Wave Pulse Width = 1uS, Square Wave	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	$^{\circ}\text{C}$

BAV19 / BAV20 / BAV21 High Voltage Switching Diode

DO-35 Axial Lead HERMETICALLY SEALED GLASS



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	0.201
C	25.40	38.10	1.000	1.500
D	1.53	2.28	0.060	0.090

Small Signal Diode

Maximum Ratings and Electrical Characteristics

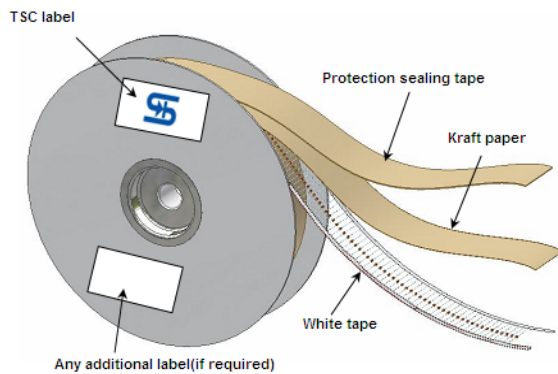
Rating at 25°C ambient temperature unless otherwise specified.

Electrical Characteristics

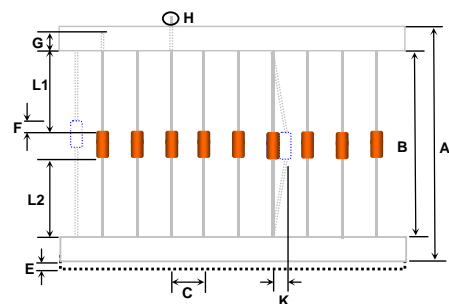
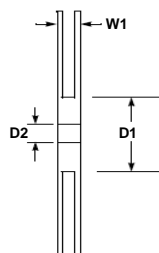
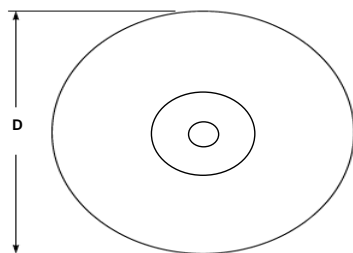
Type Number		Symbol	Min	Max	Units
Reverse Breakdown Voltage					
BAV19	$I_R=100\mu A$	$V_{(BR)}$	120	-	V
BAV20			200	-	
BAV21			250	-	
Forward Voltage	$I_F=100mA$ $I_F=200mA$	V_F	- -	1.00 1.25	V
Reverse Leakage Current					
BAV19	$V_R=100V$	I_R	-	100	nA
BAV20	$V_R=150V$		-		
BAV21	$V_R=200V$		-		
Junction Capacitance	$V_R=0, f=1.0MHz$	C_J		5.0	pF
Reverse Recovery Time (Note 1)		T_{rr}		50.0	ns

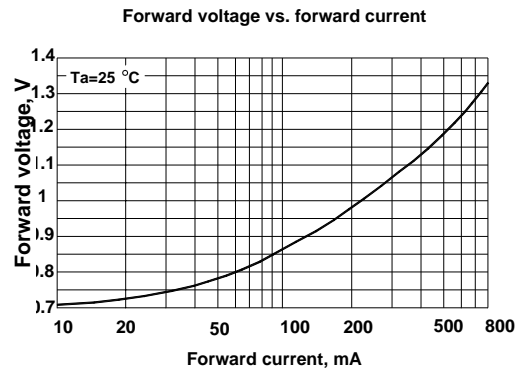
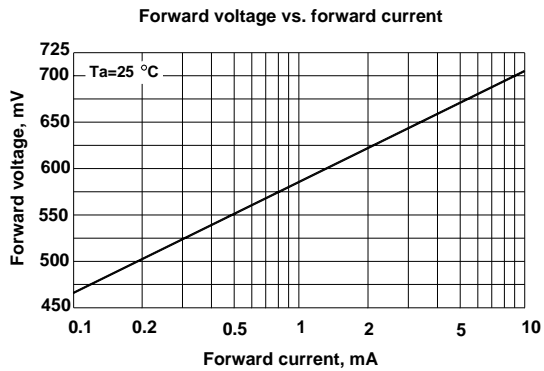
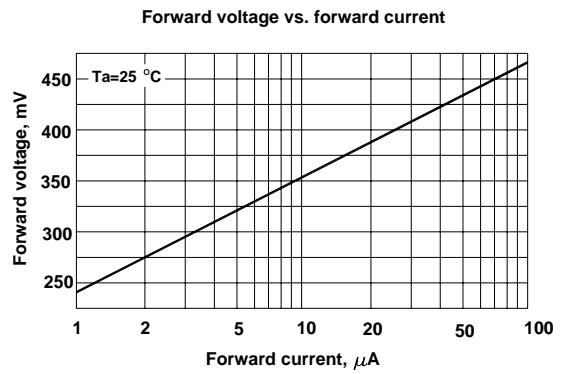
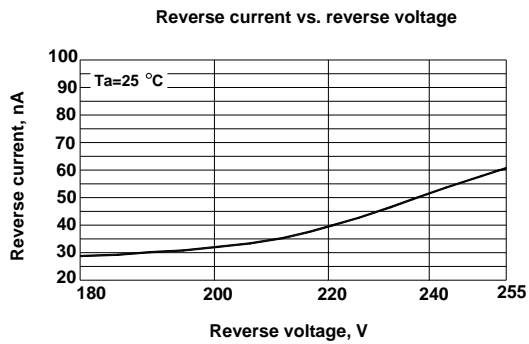
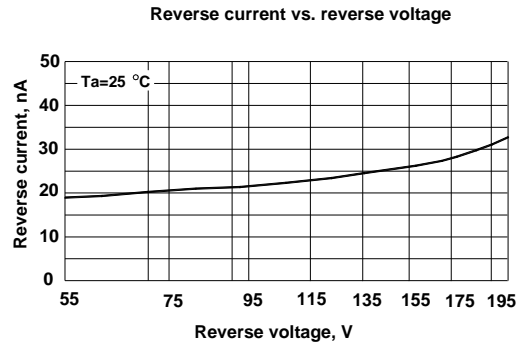
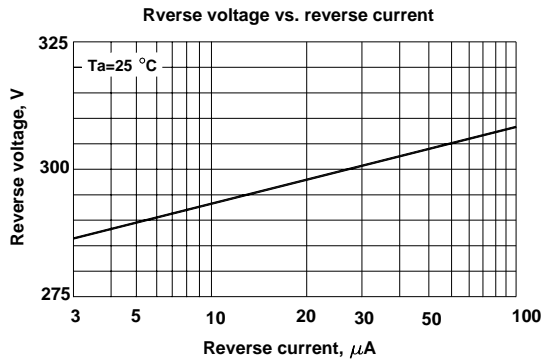
Notes: 1. Test Conditions: $I_F=I_R=30mA, R_L=100\Omega, I_{RR}=3mA$

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



Small Signal Diode
Rating and Characteristic Curves


Mouser Electronics

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Taiwan Semiconductor:

[BAV19](#) [BAV20](#) [BAV21](#)