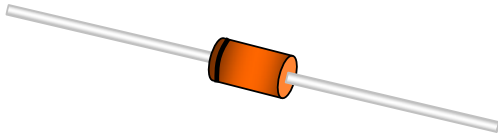


## Small Signal Diode



### Features

- ↯ Fast switching device ( $T_{rr} < 4.0nS$ )
- ↯ 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°C/10s
- ↯ Polarity : Indicated by cathode band
- ↯ Weight : 109 ± 4 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

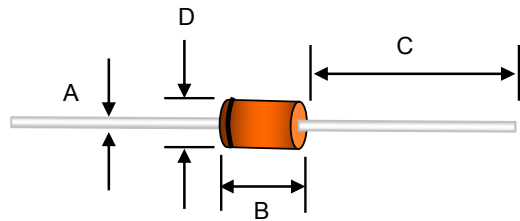
### Maximum Ratings and Electrical Characteristics

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	°C/W
Junction and Storage Temperature Range	$T_J, T_{STG}$	-65 to + 200	°C

### 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**

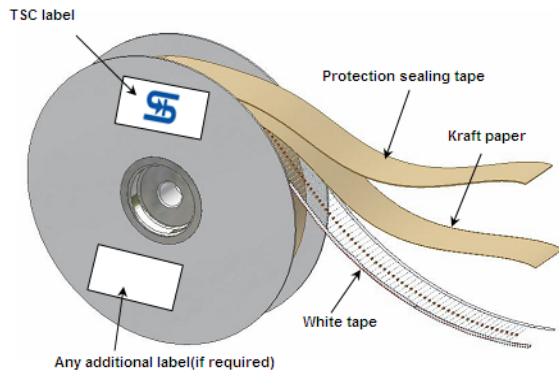
Rating at 25°C ambient temperature unless otherwise specified.

**Electrical Characteristics**

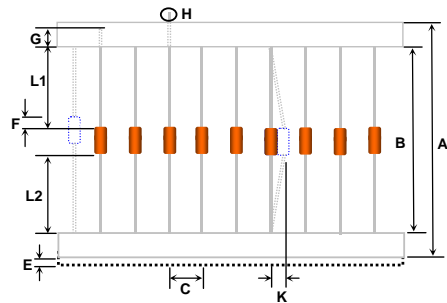
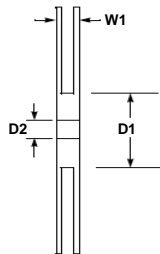
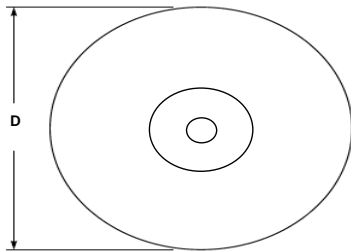
Type Number	Symbol	Min	Max	Units
Reverse Breakdown Voltage				
BAV19	$V_{(BR)}$	120	-	V
BAV20		200	-	
BAV21		250	-	
Forward Voltage				
	$V_F$		1.00	V
			1.25	
Reverse Leakage Current				
BAV19	$I_R$	-	100	nA
BAV20		-		
BAV21		-		
Junction Capacitance	$C_J$		5.0	pF
Reverse Recovery Time (Note 1)	$T_{rr}$		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**

