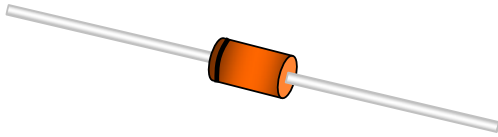


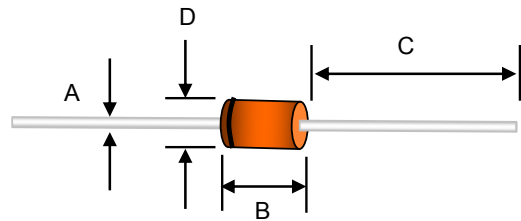
Small Signal Diode



DO-35 Axial Lead HERMETICALLY SEALED GLASS

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°C/10s
- ↯ Polarity : Indicated by cathode band
- ↯ Weight : 109 ± 4 mg

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

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

Small Signal Diode

Maximum Ratings and Electrical Characteristics

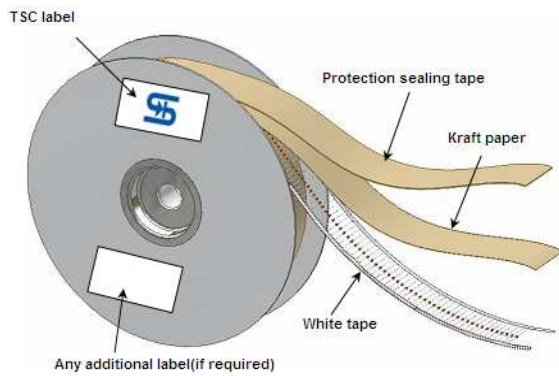
Rating at 25°C ambient temperature unless otherwise specified.

Electrical Characteristics

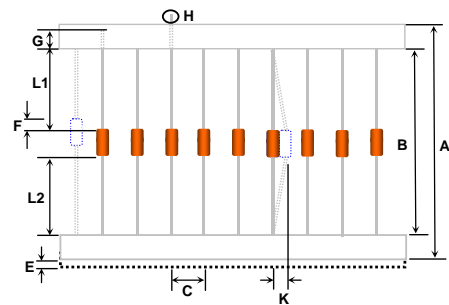
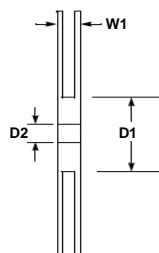
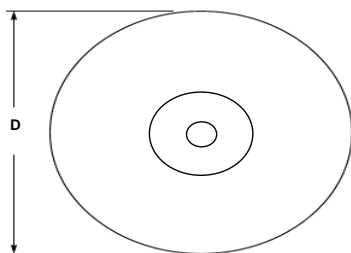
Type Number		Symbol	Min	Max	Units
Reverse Breakdown Voltage					
BAV19	I _R =100uA	V _(BR)	120	-	V
BAV20			200	-	
BAV21			250	-	
Forward Voltage					
	I _F =100mA	V _F	-	1.00	V
	I _F =200mA		-	1.25	
Reverse Leakage Current					
BAV19	V _R =100V	I _R	-	100	nA
BAV20	V _R =150V		-		
BAV21	V _R =200V		-		
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=100Ω, 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

