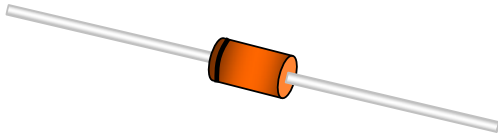


Small Signal Diode



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°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 |

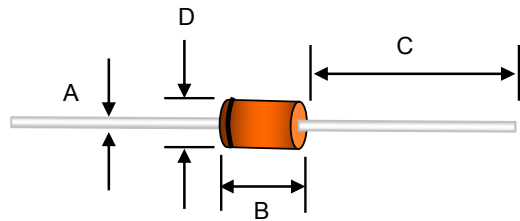
Maximum Ratings and Electrical Characteristics

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

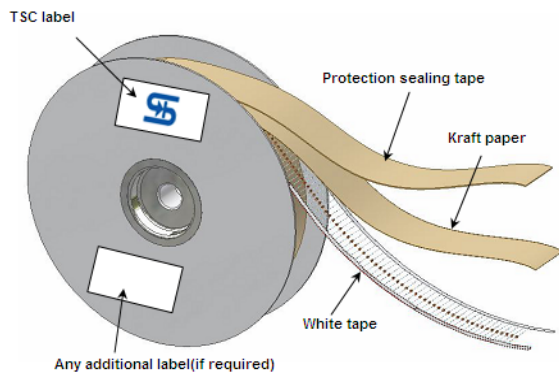
Rating at 25°C ambient temperature unless otherwise specified.

Electrical Characteristics

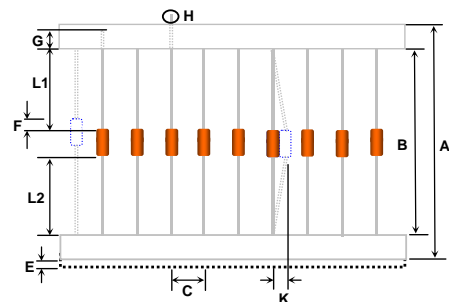
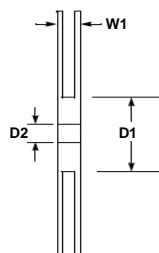
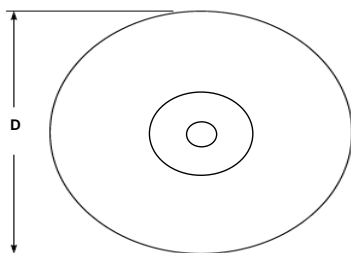
| Type Number | Symbol | Min | Max | Units |
|--------------------------------|------------|-----|------|-------|
| Reverse Breakdown Voltage | | | | |
| BAV19 | $V_{(BR)}$ | 120 | - | V |
| BAV20 | | 200 | - | |
| BAV21 | | 250 | - | |
| Forward Voltage | | | | |
| | V_F | | 1.00 | V |
| | | | 1.25 | |
| Reverse Leakage Current | | | | |
| BAV19 | I_R | | | nA |
| BAV20 | | | 100 | |
| 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

