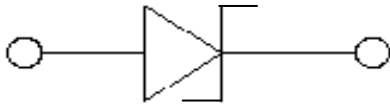


Zener Diodes



Features

- High reliability
- Very sharp reverse characteristic
- Low reverse current level
- Zener Voltage 33V



Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

■Maximum Ratings (T_a=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | VALUE |
|---|------------------|-------|---------------------------------|
| Power Dissipation*(note) | P _D | mW | 400 |
| Storage Temperature Range | T _{stg} | °C | -55~+150 |
| Junction Temperature | T _J | °C | -55~+150 |
| Maximum Forward Voltage @I _F =10mA | V _F | V | 0.9 |
| Maximum Regulator Current | I _{ZM} | mA | P _D / V _Z |
| Thermal Resistance Junction to Ambient Air*(note) | R _{θJA} | °C /W | 312 |

*Note: Device mounted on PCB

■Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| BZT52B33BS | F2 | Approximate 0.004 | 3000 | 30000 | 120000 | 7" reel |

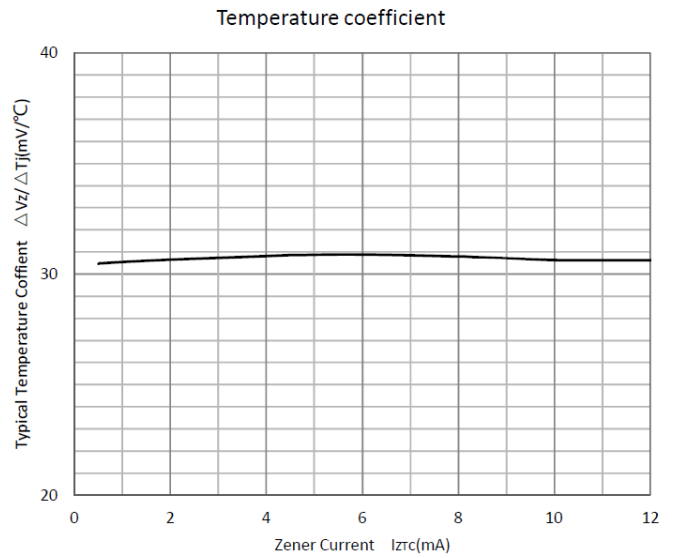
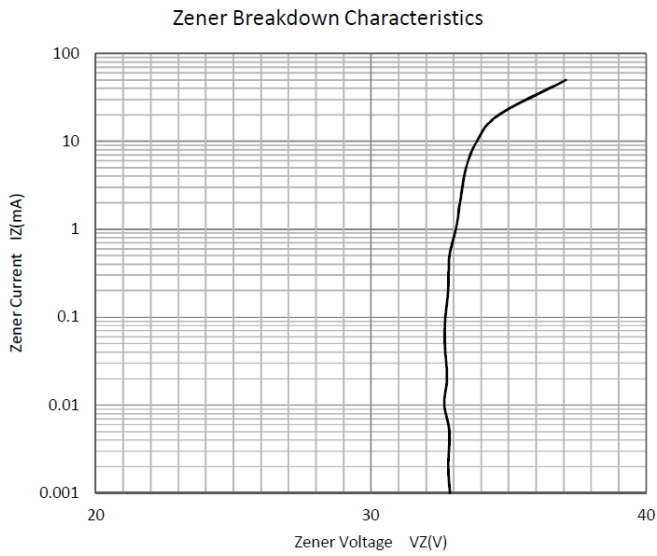
■Electrical Characteristics (T_a=25°C Unless otherwise specified)

| Type Number | Device Marking | V _Z at I _{ZT} (V) | | | Z _{ZT} (Ω) | | Z _{ZK} (Ω) | | I _R (μA)@V _R | | Typical Temperature Coefficient@ I _{ZT} C mV/°C | |
|-------------|----------------|---------------------------------------|------|------|----------------------|------|----------------------|------|------------------------------------|--------------------|--|------|
| | | min. | typ. | max. | I _{ZT} (mA) | max. | I _{ZK} (mA) | max. | max | V _R (V) | Min | Max |
| BZT52B33BS | BUZ | 32.34 | 33 | 33.7 | 5 | 80 | 1 | 325 | 0.1 | 25 | 27.4 | 33.4 |

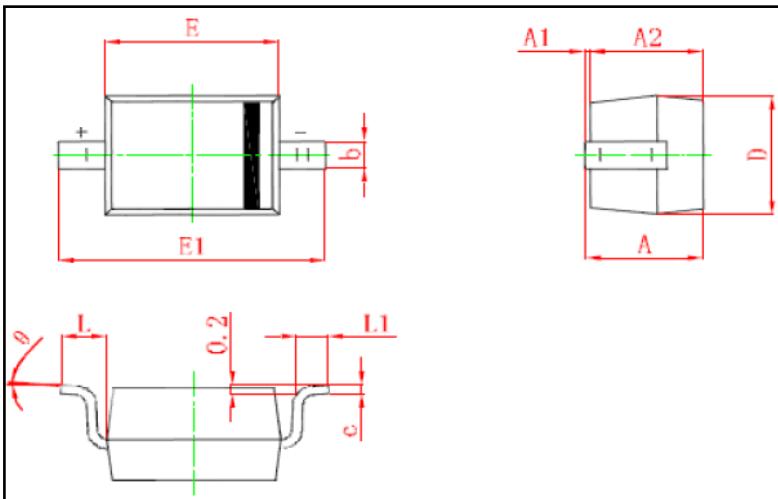


BZT52B33BS

■ Characteristics (Typical)

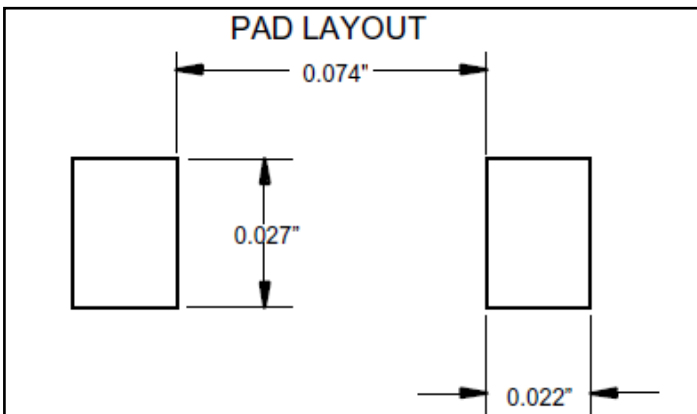


■ SOD-323 Package Outline Dimensions



| Symbol | Min. (mm) | Max. (mm) |
|--------|-----------|-----------|
| A | | 1.000 |
| A1 | 0.000 | 0.100 |
| A2 | 0.800 | 0.900 |
| b | 0.250 | 0.400 |
| c | 0.080 | 0.150 |
| D | 1.200 | 1.400 |
| E | 1.600 | 1.800 |
| E1 | 2.500 | 2.700 |
| L | 0.475REF | |
| L1 | 0.250 | 0.400 |
| θ | 0° | 8° |

■ SOD-323 Soldering Footprint





BZT52B33BS

Disclaimer

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