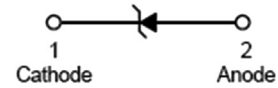
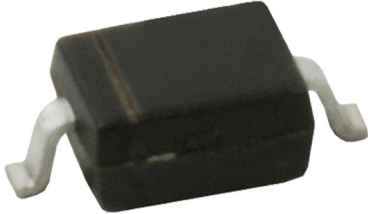


Surface Mount Zener Diode

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SOD-323

Features:

- Planar Die Construction
- General Purpose, Medium Current
- Ideally Suited for Automated Assembly Processes

Applications:

- Zener diode
- Ultra-small surface mount package

Maximum Rating @ T_A = 25°C unless otherwise specified

| Characteristic | Symbol | Value | Unit |
|---|------------------|-------------|------|
| Forward voltage @ I _F = 10mA | V _F | 0.9 | V |
| Power dissipation | P _D | 200 | mW |
| Thermal resistance, junction to ambient air | R _{θJA} | 625 | °C/W |
| Junction temperature | T _J | 150 | °C |
| Storage temperature range | T _{stg} | -65 to +150 | °C |

Note Valid provided that device terminals are kept at ambient temperature.
Short duration test pulse used in minimize self-heating effect.
f = 1kHz.

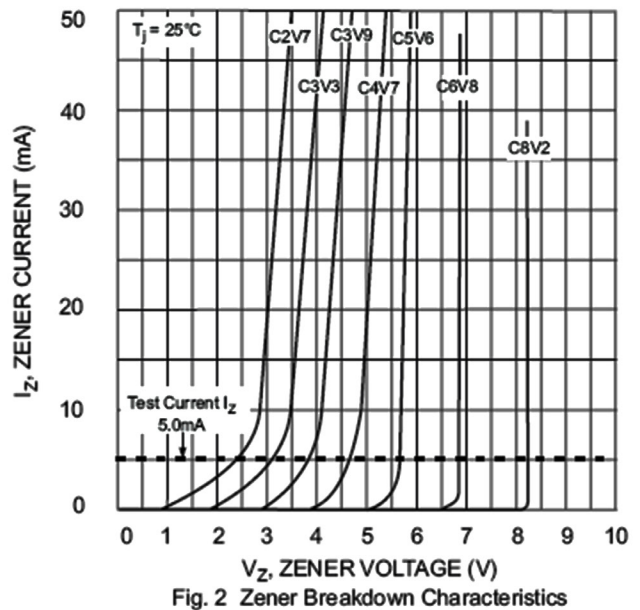
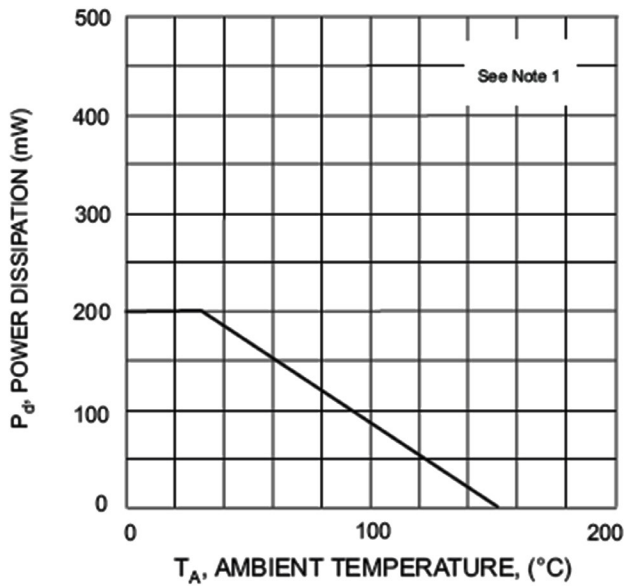
Surface Mount Zener Diode

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Type Number | Marking Code | Zener Voltage Range | | | | Maximum Zener Impedance | | | Maximum Reverse Current | | Typical Temperature Coefficient @ I_{ZTC} mV/ $^\circ\text{C}$ | |
|-------------|--------------|---------------------|--------|--------|----------|-------------------------|-------------------|---------------|-------------------------|---------|--|-----|
| | | $V_z @ I_{ZT}$ | | | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | I_{ZK} | I_R | @ V_R | Min | Max |
| | | Nom(V) | Min(V) | Max(V) | mA | Ω | mA | μA | V | | | |
| BZT52C4V7S | W7 | 4.7 | 4.4 | 5 | 5 | 80 | 500 | 1 | 3 | 2 | -3.5 | 0.2 |

Note Valid provided that device terminals are kept at ambient temperature.
 Tested with pulses, period = 5ms, pulse width = 300 μs .
 $f = 1\text{kHz}$.

Typical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified



Surface Mount Zener Diode

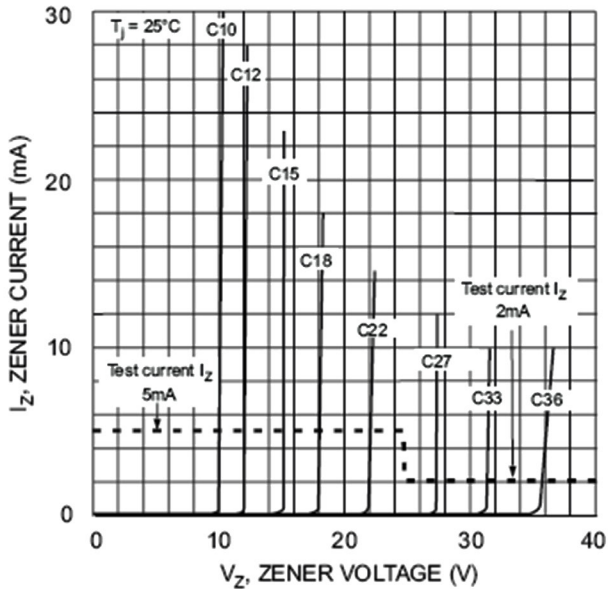


Fig. 3 Zener Breakdown Characteristics

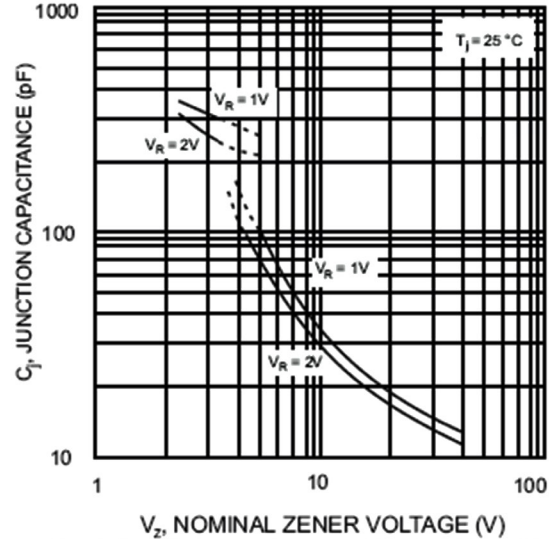
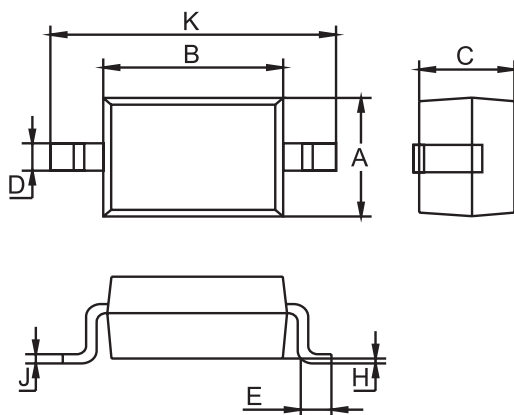


Fig. 4 Junction Capacitance vs Nominal Zener Voltage

Package Outline

Plastic surface mounted package

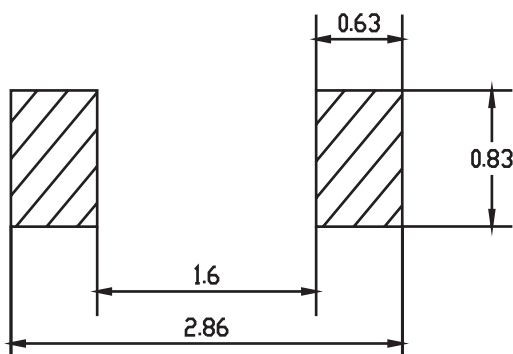


| SOD-323 | | |
|----------------------|-------------|-------|
| Dim | Min | Max |
| A | 1.275 | 1.325 |
| B | 1.675 | 1.725 |
| C | 0.9 Typical | |
| D | 0.25 | 0.35 |
| E | 0.27 | 0.37 |
| H | 0.02 | 0.1 |
| J | 0.1 Typical | |
| K | 2.6 | 2.7 |
| All Dimensions in mm | | |

Surface Mount Zener Diode

multicomp PRO

Soldering Footprint



Package Information

| Device | Package | Shipping |
|----------------|---------|-------------------|
| BZT52C4V7S-7-F | SOD-323 | 3,000/Tape & Reel |

Part Number Table

| Description | Part Number |
|---------------------------|----------------|
| Surface Mount Zener Diode | BZT52C4V7S-7-F |

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