



## Features

Planar die construction.  
200mW power dissipation on ceramic PBC.  
General purpose, medium current.  
Ideally suited for automated assembly processes.  
Available in lead free version.



SOD-123



## Package Marking and Ordering Information

| Product ID   | Pack    | Marking | Qty(PCS) |
|--------------|---------|---------|----------|
| BZT52C36-7-F | SOD-123 | WS      | 3000     |

## Absolute Maximum Ratings(Ta=25°C)

| Symbol          | Parameter                                   | Value    | Unit |
|-----------------|---------------------------------------------|----------|------|
| $V_F$           | Forward Voltage (Note 2) @ $I_F=10mA$       | 0.9      | V    |
| $P_d$           | Power Dissipation (Note 1)                  | 500      | mW   |
| $R_{\theta JA}$ | Thermal Resistance From Junction To Ambient | 250      | °C/W |
| $T_{STG}$       | Storage Temperature Range                   | -55~+150 | °C   |

## Electrical Characteristics (Ta=25°C unless otherwise specified)

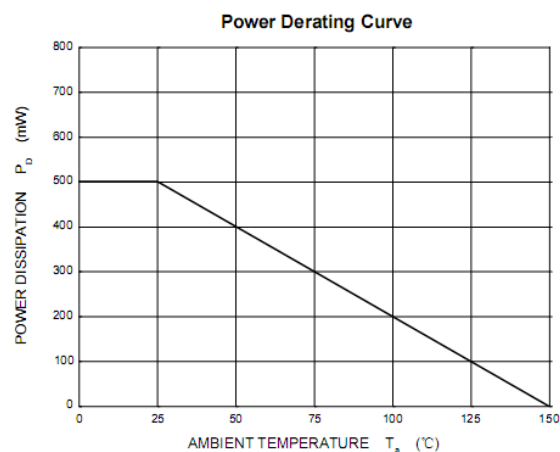
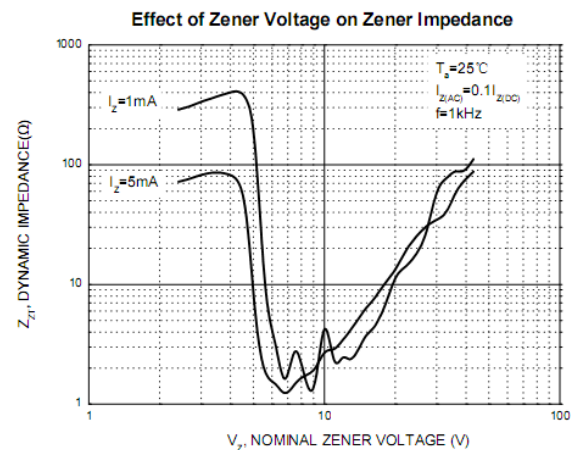
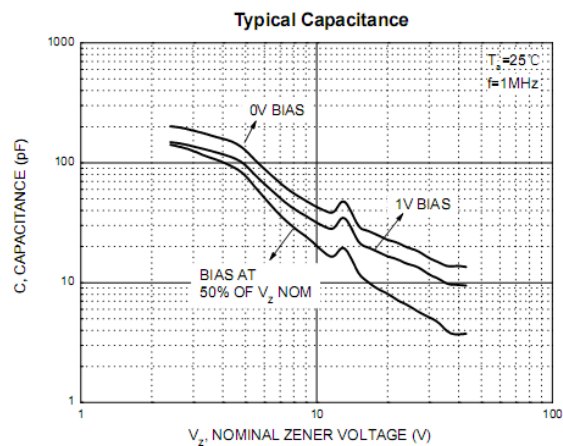
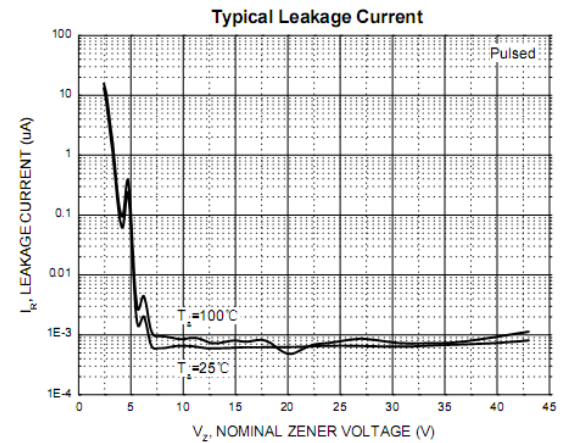
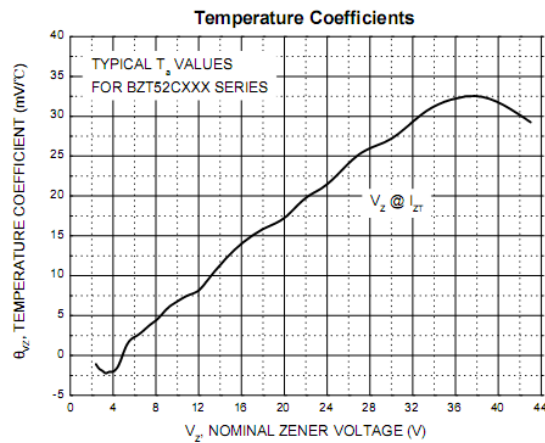
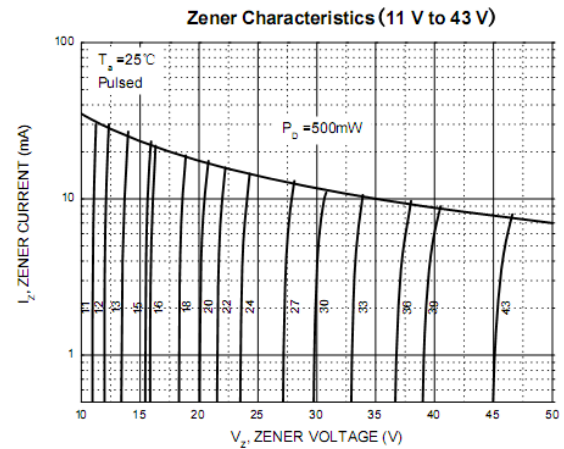
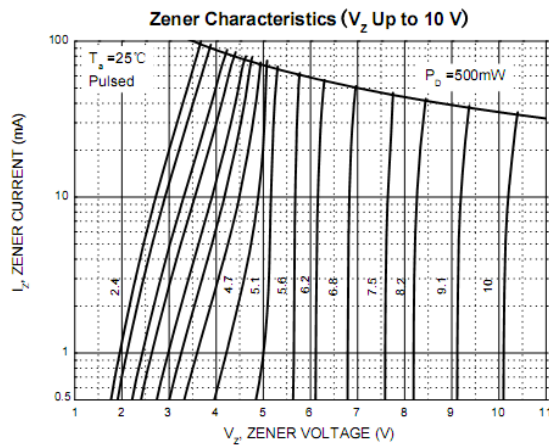
| Type         | Zener Voltage Range (Note 2) |      |      |          | Maximum Zener Impedance (Note 3) |                |          | Maximum Reverse Current (Note 2) |       | Typical Temperature Coefficient @ $I_{ZTC}$ mV/°C |      | Test Current $I_{ZTC}$ |
|--------------|------------------------------|------|------|----------|----------------------------------|----------------|----------|----------------------------------|-------|---------------------------------------------------|------|------------------------|
|              | $V_Z @ I_{ZT}$ (V)           |      |      | $I_{ZT}$ | $V_Z @ I_{ZT}$                   | $V_Z @ I_{ZK}$ | $I_{ZK}$ | $I_R$                            | $V_R$ |                                                   |      |                        |
|              | Nom                          | Min  | Max  | (mA)     | $\Omega$                         |                | (mA)     | $\mu A$                          | V     | Min                                               | Max  | mA                     |
| BZT52C36-7-F | 36                           | 34.0 | 38.0 | 2        | 90                               | 350            | 0.5      | 0.1                              | 25.2  | 30.4                                              | 37.4 | 2                      |

Notes:

1. Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm<sup>2</sup>.
2. Short duration test pulse used to minimize self-heating effect.
3. f = 1kHz.

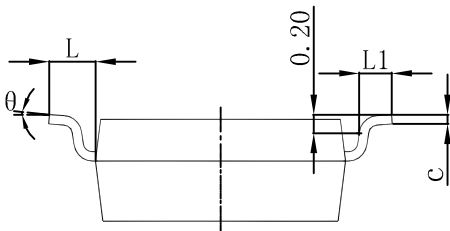
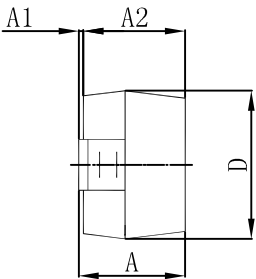
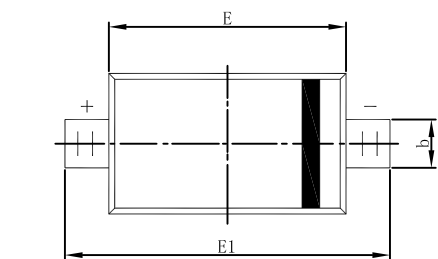


## Typical Characteristics

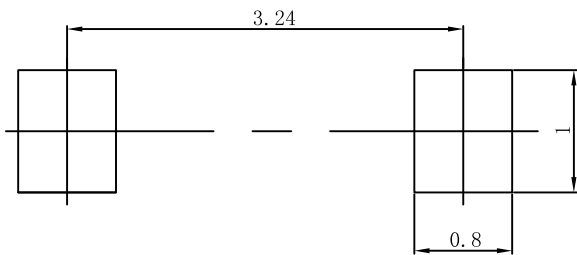




Package Outline Dimensions  
SOD-123



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 1.050                     | 1.250 | 0.041                | 0.049 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 1.050                     | 1.150 | 0.041                | 0.045 |
| b      | 0.450                     | 0.650 | 0.018                | 0.026 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 1.500                     | 1.700 | 0.059                | 0.067 |
| E      | 2.600                     | 2.800 | 0.102                | 0.110 |
| E1     | 3.550                     | 3.850 | 0.140                | 0.152 |
| L      | 0.500 REF                 |       | 0.020 REF            |       |
| L1     | 0.250                     | 0.450 | 0.010                | 0.018 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |



**Note:**  
1.Controlling dimension:in millimeters.  
2.General tolerance:± 0.05mm.  
3.The pad layout is for reference purposes only.



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