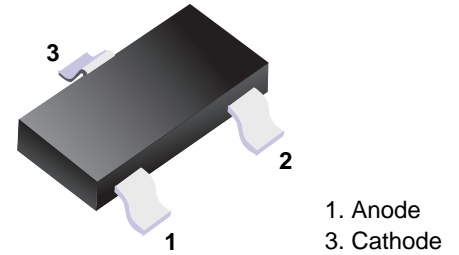
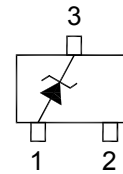


Silicon Planar Zener Diodes

This series of Zener diodes is offered in the convenient, surface mount plastic SOT-23 package. These devices are designed to provide voltage regulation with minimum space requirement. They are well suited for applications such as cellular phones, hand held portables, and high density PC boards.



■ Simplified outline(SOT-23)



Features

- ◆ Zener breakdown voltage range - 2.4 V to 75 V
- ◆ Package designed for optimal automated board assembly
- ◆ Small package size for high density applications

Absolute Maximum Ratings(Ta= 25°C)

| Parameter | Symbol | Value | Unit |
|---|-----------------------------------|---------------|------|
| Power Dissipation | P _D | 350 | mW |
| Thermal Resistance, Junction to Ambient ¹⁾ | R _{θJA} | 417 | °C/W |
| Junction and Storage Temperature Range | T _j , T _{stg} | - 65 to + 150 | °C |

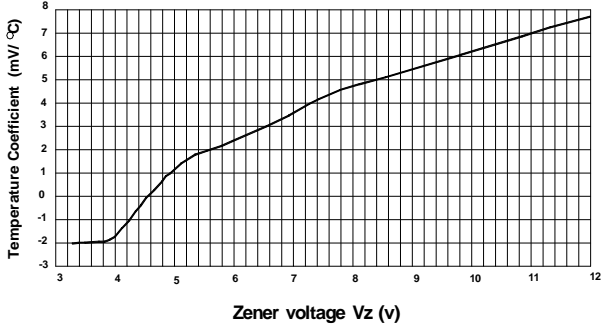
¹⁾ Alumina = 0.4 X 0.3 X 0.024 in, 99.5% alumina

Electrical Characteristics ($T_a = 25\text{ }^\circ\text{C}$ unless otherwise noted, $V_F < 0.9\text{ V}$ at $I_F = 10\text{ mA}$)

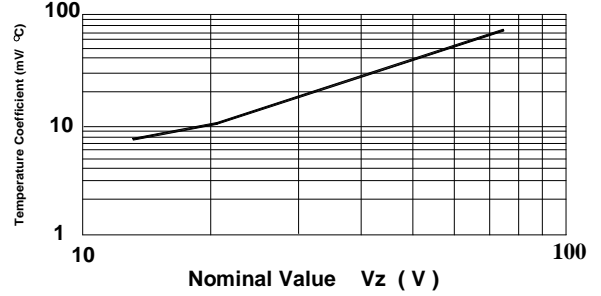
| Type | Marking Code | Zener Voltage Range ¹⁾ | | | | Dynamic Impedance | | Reverse Current | |
|-----------|--------------|-----------------------------------|----------|----------|-------------|-------------------|-------------|------------------------|----------|
| | | V_{ZT} | | | at I_{ZT} | Z_{ZT} | at I_{ZT} | I_R | at V_R |
| | | Nom. (V) | Min. (V) | Max. (V) | (mA) | Max. (Ω) | (mA) | Max. (μA) | (V) |
| BZX84B2V4 | CR | 2.4 | 2.35 | 2.45 | 5 | 100 | 5 | 50 | 1 |
| BZX84B2V7 | CX | 2.7 | 2.65 | 2.75 | 5 | 100 | 5 | 20 | 1 |
| BZX84B3V0 | CY | 3 | 2.94 | 3.06 | 5 | 95 | 5 | 10 | 1 |
| BZX84B3V3 | CZ | 3.3 | 3.23 | 3.37 | 5 | 95 | 5 | 5 | 1 |
| BZX84B3V6 | DA | 3.6 | 3.53 | 3.67 | 5 | 90 | 5 | 5 | 1 |
| BZX84B3V9 | DB | 3.9 | 3.82 | 3.98 | 5 | 90 | 5 | 3 | 1 |
| BZX84B4V3 | DC | 4.3 | 4.21 | 4.39 | 5 | 90 | 5 | 3 | 1 |
| BZX84B4V7 | DD | 4.7 | 4.61 | 4.79 | 5 | 80 | 5 | 3 | 2 |
| BZX84B5V1 | DE | 5.1 | 5 | 5.2 | 5 | 60 | 5 | 2 | 2 |
| BZX84B5V6 | DF | 5.6 | 5.49 | 5.71 | 5 | 40 | 5 | 1 | 2 |
| BZX84B6V2 | DH | 6.2 | 6.08 | 6.32 | 5 | 10 | 5 | 3 | 4 |
| BZX84B6V8 | DJ | 6.8 | 6.66 | 6.94 | 5 | 15 | 5 | 2 | 4 |
| BZX84B7V5 | DK | 7.5 | 7.35 | 7.65 | 5 | 15 | 5 | 1 | 5 |
| BZX84B8V2 | DM | 8.2 | 8.04 | 8.36 | 5 | 15 | 5 | 0.7 | 5 |
| BZX84B9V1 | DN | 9.1 | 8.92 | 9.28 | 5 | 15 | 5 | 0.5 | 6 |
| BZX84B10 | DP | 10 | 9.8 | 10.2 | 5 | 20 | 5 | 0.2 | 7 |
| BZX84B11 | DR | 11 | 10.8 | 11.2 | 5 | 20 | 5 | 0.1 | 8 |
| BZX84B12 | DX | 12 | 11.8 | 12.2 | 5 | 25 | 5 | 0.1 | 8 |
| BZX84B13 | DY | 13 | 12.7 | 13.3 | 5 | 30 | 5 | 0.1 | 8 |
| BZX84B15 | DZ | 15 | 14.7 | 15.3 | 5 | 30 | 5 | 0.05 | 10.5 |
| BZX84B16 | EA | 16 | 15.7 | 16.3 | 5 | 40 | 5 | 0.05 | 11.2 |
| BZX84B18 | EB | 18 | 17.6 | 18.4 | 5 | 45 | 5 | 0.05 | 12.6 |
| BZX84B20 | EC | 20 | 19.6 | 20.4 | 5 | 55 | 5 | 0.05 | 14 |
| BZX84B22 | ED | 22 | 21.6 | 22.4 | 5 | 55 | 5 | 0.05 | 15.4 |
| BZX84B24 | EE | 24 | 23.5 | 24.5 | 5 | 70 | 5 | 0.05 | 16.8 |
| BZX84B27 | EF | 27 | 26.5 | 27.5 | 2 | 80 | 2 | 0.05 | 18.9 |
| BZX84B30 | EH | 30 | 29.4 | 30.6 | 2 | 80 | 2 | 0.05 | 21 |
| BZX84B33 | EJ | 33 | 32.3 | 33.7 | 2 | 80 | 2 | 0.05 | 23.1 |
| BZX84B36 | EK | 36 | 35.3 | 36.7 | 2 | 90 | 2 | 0.05 | 25.2 |
| BZX84B39 | EM | 39 | 38.2 | 39.8 | 2 | 130 | 2 | 0.05 | 27.3 |
| BZX84B43 | EN | 43 | 42.1 | 43.9 | 2 | 150 | 2 | 0.05 | 30.1 |
| BZX84B47 | EP | 47 | 46.1 | 47.9 | 2 | 170 | 2 | 0.05 | 32.9 |
| BZX84B51 | ER | 51 | 50 | 52 | 2 | 180 | 2 | 0.05 | 35.7 |
| BZX84B56 | EX | 56 | 54.9 | 57.1 | 2 | 200 | 2 | 0.05 | 39.2 |
| BZX84B62 | EY | 62 | 60.8 | 63.2 | 2 | 215 | 2 | 0.05 | 43.4 |
| BZX84B68 | EZ | 68 | 66.6 | 69.4 | 2 | 240 | 2 | 0.05 | 47.6 |
| BZX84B75 | FA | 75 | 73.5 | 76.5 | 2 | 255 | 2 | 0.05 | 52.5 |

¹⁾ Tested with pulses $t_p = 20\text{ ms}$.

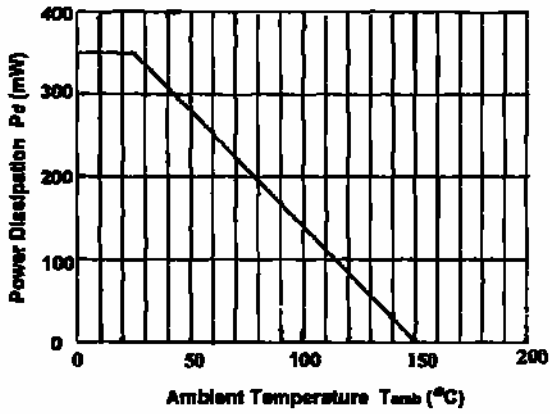
Temperature Coefficient



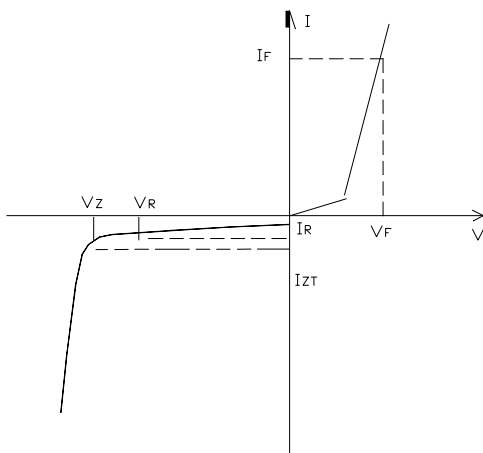
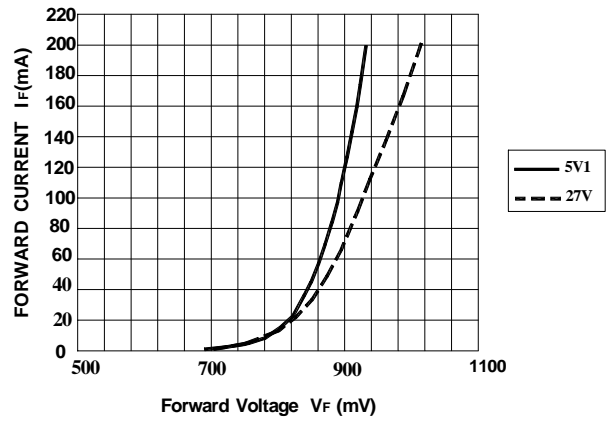
Temperature Coefficient



Power Derating Curve



Typical Forward Voltage

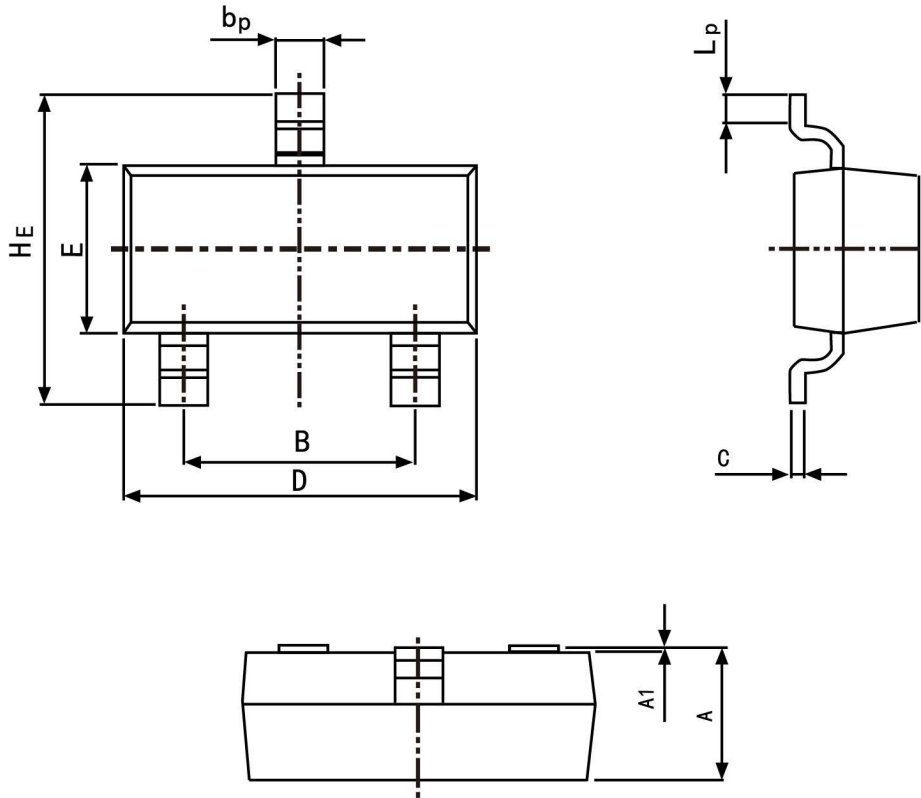


Zener Voltage Regulator

Package Outline

SOT-23

Plastic surface mounted package; 3 leads



| Symbol | Dimension in Millimeters | |
|--------|--------------------------|-------|
| | Min | Max |
| A | 0.95 | 1.40 |
| B | 1.78 | 2.04 |
| bp | 0.35 | 0.50 |
| C | 0.08 | 0.19 |
| D | 2.70 | 3.10 |
| E | 1.20 | 1.65 |
| HE | 2.20 | 3.00 |
| A1 | 0.100 | 0.013 |
| Lp | 0.20 | 0.50 |

Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| SOT-23 | Tape/Reel, 7" reel | 3000 | EIA-481-1 |

单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)