

Plastic-Encapsulate Diode

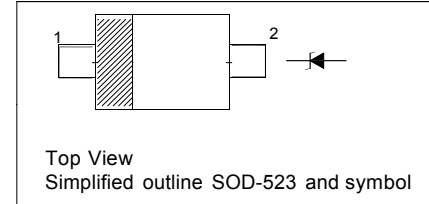
ZENER DIODE

FEATURES

- Planar Die Construction
- 100mW Power Dissipation
- Zener Voltages from 2.4 – 75V

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



Maximum Ratings($T_a=25^{\circ}\text{C}$ unless otherwise specified)

| Characteristic | Symbol | Value | Unit |
|---|-----------------|------------|-----------------------------|
| Forward Voltage @ $I_F=10\text{mA}$ | V_F | 0.9 | V |
| Power Dissipation | P_D | 150 | mW |
| Thermal Resistance, Junction to Ambient Air | $R_{\theta JA}$ | 625 | $^{\circ}\text{C}/\text{w}$ |
| Operating and Storage Temperature Range | T_j, T_{STG} | -65 ~ +150 | $^{\circ}\text{C}$ |

Electrical Characteristics (25 °C unless otherwise specitied)

| Type Number | Type Code | Zener Voltage Range (Note 2) | | | | Maximum Zener Impedance (Note 3) | | | Maximum Reverse Current | |
|-------------|-----------|----------------------------------|--------|--------|-----------------|-----------------------------------|-----------------------------------|------|-------------------------|----------------|
| | | V _Z @ I _{ZT} | | | I _{ZT} | Z _{ZT} @ I _{ZT} | Z _{ZK} @ I _{ZK} | | I _R | V _R |
| | | Nom(V) | Min(V) | Max(V) | (mA) | (Ω) | (mA) | (μA) | (V) | |
| BZX584C2V4 | Z11 | 2.4 | 2.20 | 2.60 | 5 | 100 | 600 | 1.0 | 50 | 1.0 |
| BZX584C2V7 | Z12 | 2.7 | 2.5 | 2.9 | 5 | 100 | 600 | 1.0 | 20 | 1.0 |
| BZX584C3V0 | Z13 | 3.0 | 2.8 | 3.2 | 5 | 95 | 600 | 1.0 | 10 | 1.0 |
| BZX584C3V3 | Z14 | 3.3 | 3.1 | 3.5 | 5 | 95 | 600 | 1.0 | 5 | 1.0 |
| BZX584C3V6 | Z15 | 3.6 | 3.4 | 3.8 | 5 | 90 | 600 | 1.0 | 5 | 1.0 |
| BZX584C3V9 | Z16 | 3.9 | 3.7 | 4.1 | 5 | 90 | 600 | 1.0 | 3 | 1.0 |
| BZX584C4V3 | Z17 | 4.3 | 4.0 | 4.6 | 5 | 90 | 600 | 1.0 | 3 | 1.0 |
| BZX584C4V7 | Z1 | 4.7 | 4.4 | 5.0 | 5 | 80 | 500 | 1.0 | 3 | 2.0 |
| BZX584C5V1 | Z2 | 5.1 | 4.8 | 5.4 | 5 | 60 | 480 | 1.0 | 2 | 2.0 |
| BZX584C5V6 | Z3 | 5.6 | 5.2 | 6.0 | 5 | 40 | 400 | 1.0 | 1 | 2.0 |
| BZX584C6V2 | Z4 | 6.2 | 5.8 | 6.6 | 5 | 10 | 150 | 1.0 | 3 | 4.0 |
| BZX584C6V8 | Z5 | 6.8 | 6.4 | 7.2 | 5 | 15 | 80 | 1.0 | 2 | 4.0 |
| BZX584C7V5 | Z6 | 7.5 | 7.0 | 7.9 | 5 | 15 | 80 | 1.0 | 1 | 5.0 |
| BZX584C8V2 | Z7 | 8.2 | 7.7 | 8.7 | 5 | 15 | 80 | 1.0 | 0.7 | 5.0 |
| BZX584C9V1 | Z8 | 9.1 | 8.5 | 9.6 | 5 | 15 | 100 | 1.0 | 0.5 | 6.0 |
| BZX584C10 | Z9 | 10 | 9.4 | 10.6 | 5 | 20 | 150 | 1.0 | 0.2 | 7.0 |
| BZX584C11 | Y1 | 11 | 10.4 | 11.6 | 5 | 20 | 150 | 1.0 | 0.1 | 8.0 |
| BZX584C12 | Y2 | 12 | 11.4 | 12.7 | 5 | 25 | 150 | 1.0 | 0.1 | 8.0 |
| BZX584C13 | Y3 | 13 | 12.4 | 14.1 | 5 | 30 | 170 | 1.0 | 0.1 | 8.0 |
| BZX584C15 | Y4 | 15 | 13.8 | 15.6 | 5 | 30 | 200 | 1.0 | 0.1 | 10.5 |
| BZX584C16 | Y5 | 16 | 15.3 | 17.1 | 5 | 40 | 200 | 1.0 | 0.1 | 11.2 |
| BZX584C18 | Y6 | 18 | 16.8 | 19.1 | 5 | 45 | 225 | 1.0 | 0.1 | 12.6 |
| BZX584C20 | Y7 | 20 | 18.8 | 21.2 | 5 | 55 | 225 | 1.0 | 0.1 | 14.0 |
| BZX584C22 | Y8 | 22 | 20.8 | 23.3 | 5 | 55 | 250 | 1.0 | 0.1 | 15.4 |
| BZX584C24 | Y9 | 24 | 22.8 | 25.6 | 5 | 70 | 250 | 1.0 | 0.1 | 16.8 |
| BZX584C27 | Y10 | 27 | 25.1 | 28.9 | 2 | 80 | 300 | 0.5 | 0.1 | 18.9 |
| BZX584C30 | Y11 | 30 | 28.0 | 32.0 | 2 | 80 | 300 | 0.5 | 0.1 | 21.0 |
| BZX584C33 | Y12 | 33 | 31.0 | 35.0 | 2 | 80 | 325 | 0.5 | 0.1 | 23.1 |
| BZX584C36 | Y13 | 36 | 34.0 | 38.0 | 2 | 90 | 350 | 0.5 | 0.1 | 25.2 |
| BZX584C39 | Y14 | 39 | 37.0 | 41.0 | 2 | 130 | 350 | 0.5 | 0.1 | 27.3 |
| BZX584C43 | Y15 | 43 | 40 | 46 | 2.5 | 130 | 500 | 1 | 2 | 33 |
| BZX584C47 | Y16 | 47 | 44 | 50 | 2.5 | 150 | 500 | 1 | 2 | 36 |
| BZX584C51 | Y17 | 51 | 48 | 54 | 2.5 | 180 | 500 | 1 | 1 | 39 |
| BZX584C56 | Y18 | 56 | 52 | 60 | 2.5 | 180 | 500 | 1 | 1 | 43 |
| BZX584C62 | Y19 | 62 | 58 | 66 | 2.5 | 200 | 500 | 1 | 0.2 | 47 |
| BZX584C68 | Y20 | 68 | 64 | 72 | 2.5 | 250 | 500 | 1 | 0.2 | 52 |
| BZX584C75 | Y21 | 75 | 70 | 79 | 2.5 | 300 | 500 | 1 | 0.2 | 57 |

Notes: 1. Valid provided that device terminals are kept at ambient temperature.

2. Tested with pulses, period=5ms, pulse width =300us.

3. f = 1KHz

Typical Characteristics

