



Power Dissipation 200mW Zener Diode BZX584C2V4 SOD-523 Thin SMD Package

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: REACH, RoHS, ISO
- Model Number: BZX584C2V4
- Minimum Order Quantity: 8000PCS
- Price: Negotiable
- Delivery Time: 5-8 work days



Product Specification

- Product Name: Zener Diode
- Product Package Type: SOD-523
- PD: 200mW
- VZ (Nom.): 2.4V
- VZ (Min.): 2.2V
- VZ (Max.): 2.6V
- IZK: 1.0mA
- IR (Max.): 20 μ A
- Highlight: 200mW Zener Diode, Zener Diode BZX584C2V4, Power Dissipation Diode 200mW



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Product Description

Power Dissipation 200mW Zener Diode BZX584C2V4 SOD-523 Thin SMD Package

Surface Mount Zener Diode DATASHEET: [BZX584C2V4_BZX584C75V\(SOD-523\)_v2303.1.pdf](#)

Surface Mount Zener Diode Characteristics:

Constant voltage control
 It has wide voltage range selection 2.4V to 75V
 Surface Mount Zener Diode is SOD-523 Thin SMD package
 RoHS compliant / Green EMC
 Matte Tin (Sn) Lead finish
 Cathode Band / Device marking
 Refer to table list

Surface Mount Zener Diode Absolute Maximum Ratings (TA=25) :

| Parameter | Symbol | Value | Units |
|---------------------------|--------|-------------|-------|
| Power Dissipation | PD | 200 | mW |
| Junction Temperature | TJ | 150 | |
| Storage Temperature | TSTG | -55 to +150 | |
| Maximum Regulator Current | IZM | PD / VZ | mA |

Surface Mount Zener Diode Electrical Characteristics (TA=25) :

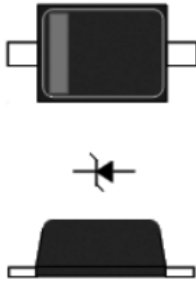
| Part Number | VZ *1 | | | IZT (mA) | ZZT @ IZT Max.(Ω) | ZZK @ IZK | IZK (mA) | IR Max. (μA) | VR (V) |
|-------------|-------------|-------------|-------------|-------------|-------------------------|--------------|-------------|--------------------|-----------|
| | Nom. (V) | Min. (V) | Max. (V) | | | | | | |
| BZX584C2V4 | 2.4 | 2.2 | 2.6 | 5 | 100 | 600 | 1.0 | 50 | 1.0 |
| BZX584C2V7 | 2.7 | 2.5 | 2.9 | 5 | 100 | 600 | 1.0 | 20 | 1.0 |
| BZX584C3V0 | 3.0 | 2.8 | 3.2 | 5 | 95 | 600 | 1.0 | 10 | 1.0 |
| BZX584C3V3 | 3.3 | 3.1 | 3.5 | 5 | 95 | 600 | 1.0 | 5 | 1.0 |
| BZX584C3V6 | 3.6 | 3.4 | 3.8 | 5 | 90 | 600 | 1.0 | 5 | 1.0 |
| BZX584C3V9 | 3.9 | 3.7 | 4.1 | 5 | 90 | 600 | 1.0 | 3 | 1.0 |
| BZX584C4V3 | 4.3 | 4.0 | 4.6 | 5 | 90 | 600 | 1.0 | 3 | 1.0 |
| BZX584C4V7 | 4.7 | 4.4 | 5.0 | 5 | 80 | 500 | 1.0 | 3 | 2.0 |
| BZX584C5V1 | 5.1 | 4.8 | 5.4 | 5 | 60 | 480 | 1.0 | 2 | 2.0 |
| BZX584C5V6 | 5.6 | 5.2 | 6.0 | 5 | 40 | 400 | 1.0 | 1 | 2.0 |
| BZX584C6V2 | 6.2 | 5.8 | 6.6 | 5 | 10 | 150 | 0.5 | 3 | 4.0 |
| BZX584C6V8 | 6.8 | 6.4 | 7.2 | 5 | 15 | 80 | 0.5 | 2 | 4.0 |
| BZX584C7V5 | 7.5 | 7.0 | 7.9 | 5 | 15 | 80 | 0.5 | 1 | 5.0 |
| BZX584C8V2 | 8.2 | 7.7 | 8.7 | 5 | 15 | 80 | 0.5 | 0.7 | 5.0 |
| BZX584C9V1 | 9.1 | 8.5 | 9.6 | 5 | 15 | 100 | 0.5 | 0.5 | 6.0 |
| BZX584C10V | 10 | 9.4 | 10.6 | 5 | 20 | 150 | 1.0 | 0.2 | 7.0 |
| BZX584C11V | 11 | 10.4 | 11.6 | 5 | 20 | 150 | 1.0 | 0.1 | 8.0 |
| BZX584C12V | 12 | 11.4 | 12.7 | 5 | 25 | 150 | 1.0 | 0.1 | 8.0 |
| BZX584C13V | 13 | 12.4 | 14.1 | 5 | 30 | 170 | 1.0 | 0.1 | 8.0 |

| | | | | | | | | | |
|------------|----|-------|-------|---|-----|------|------|-----|------|
| BZX584C15V | 15 | 13.8 | 15.6 | 5 | 30 | 200 | 1.0 | 0.1 | 10.5 |
| BZX584C16V | 16 | 15.3 | 17.1 | 5 | 40 | 200 | 1.0 | 0.1 | 11.2 |
| BZX584C18V | 18 | 16.8 | 19.1 | 5 | 45 | 225 | 1.0 | 0.1 | 12.6 |
| BZX584C20V | 20 | 18.8 | 21.2 | 5 | 55 | 225 | 1.0 | 0.1 | 14.0 |
| BZX584C22V | 22 | 20.8 | 23.3 | 5 | 55 | 250 | 1.0 | 0.1 | 15.4 |
| BZX584C24V | 24 | 22.8 | 25.6 | 5 | 70 | 250 | 1.0 | 0.1 | 16.8 |
| BZX584C27V | 27 | 25.1 | 28.9 | 2 | 80 | 300 | 0.5 | 0.1 | 18.9 |
| BZX584C30V | 30 | 28.0 | 32.0 | 2 | 80 | 300 | 0.5 | 0.1 | 21.0 |
| BZX584C33V | 33 | 31.0 | 35.0 | 2 | 80 | 325 | 0.5 | 0.1 | 23.1 |
| BZX584C36V | 36 | 34.0 | 38.0 | 2 | 90 | 350 | 0.5 | 0.1 | 25.2 |
| BZX584C39V | 39 | 37.0 | 41.0 | 2 | 130 | 350 | 0.5 | 0.1 | 27.3 |
| BZX584C43V | 43 | 40.0 | 46.0 | 2 | 100 | 700 | 1.0 | 0.1 | 32.0 |
| BZX584C47V | 47 | 44.65 | 49.35 | 2 | 170 | 1000 | 0.25 | 0.1 | 36.0 |
| BZX584C51V | 51 | 48.45 | 53.55 | 2 | 180 | 1300 | 0.25 | 0.1 | 39.0 |
| BZX584C56V | 56 | 53.2 | 58.8 | 2 | 200 | 1400 | 0.25 | 0.1 | 43.0 |
| BZX584C62V | 62 | 58.9 | 65.1 | 2 | 225 | 1400 | 0.25 | 0.1 | 47.0 |
| BZX584C68V | 68 | 64.6 | 71.4 | 2 | 240 | 1600 | 0.25 | 0.1 | 52.0 |
| BZX584C75V | 75 | 71.25 | 78.75 | 2 | 265 | 1700 | 0.25 | 0.1 | 56.0 |

*1 Pulse width = 10 ms.

SOD-523 Surface Mount Zener Diode Circuit Diagram:

SOD-523



**SOD-523 Surface Mount Zener Diode Typical Characteristics:
Fig1. Zener Breakdown Characteristic**

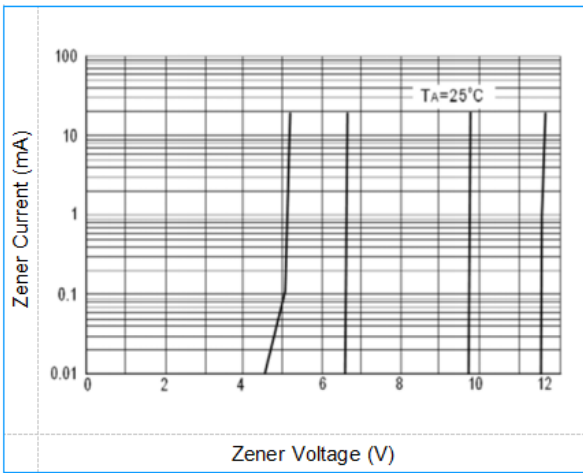


Fig2. Zener Breakdown Characteristics

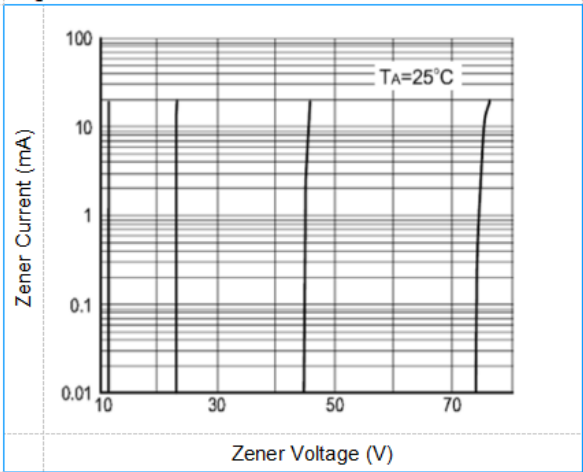


Fig3. Typical Forward Voltage

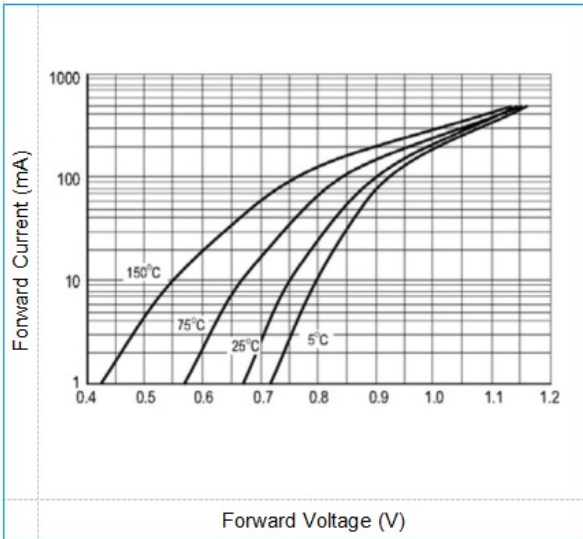


Fig4. Effect of Zener Voltage on Zener Impedance

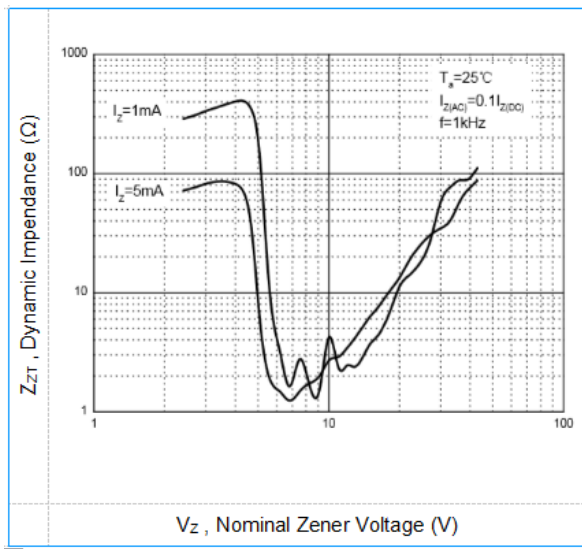


Fig5. Typical Capacitance

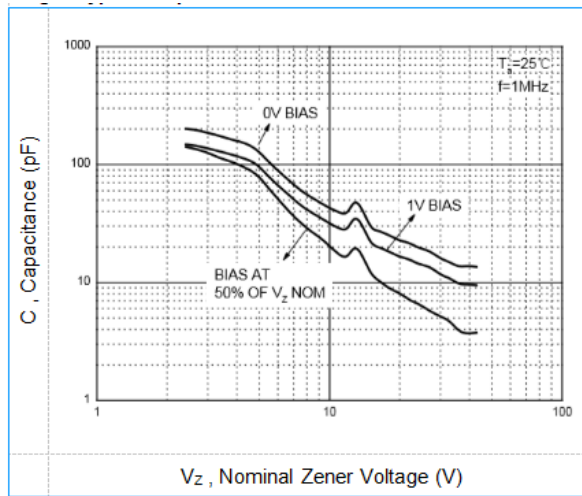


Fig6. Typical Leakage Current

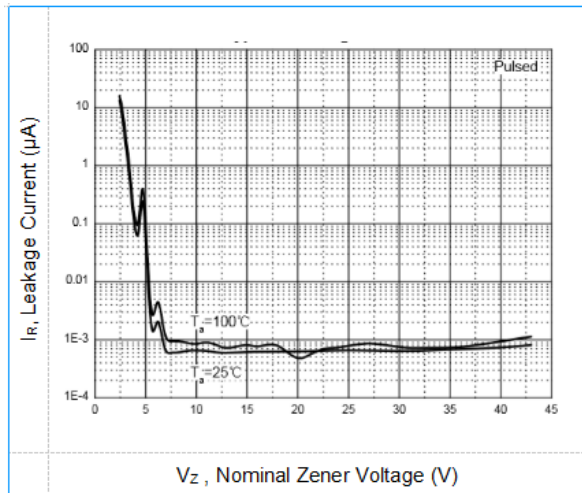
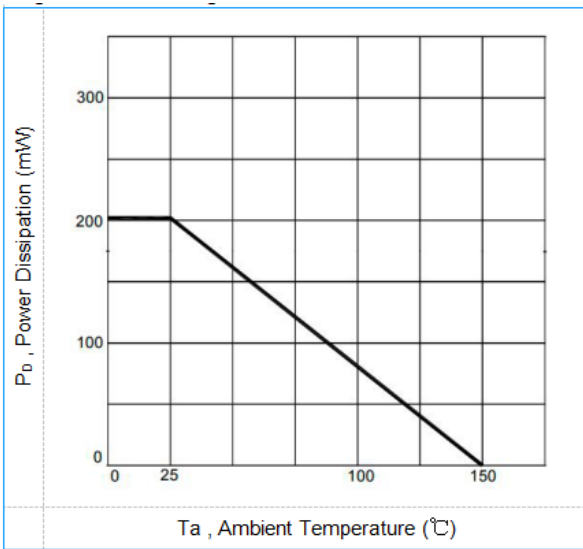
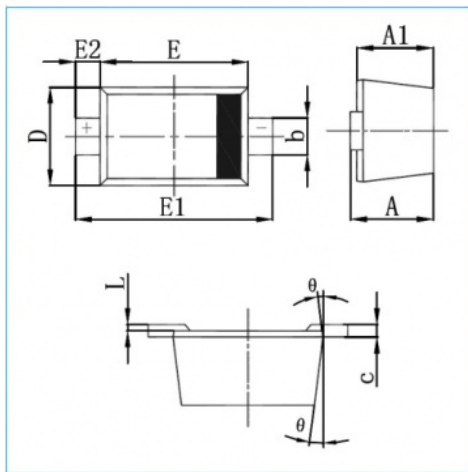


Fig7. Power Derating Curve



SOD-523 Surface Mount Zener Diode Dimensions:



| Symbol | Dimensions in Millimeters | | Dimensions in Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.510 | 0.770 | 0.020 | 0.031 |
| A1 | 0.500 | 0.700 | 0.020 | 0.028 |
| b | 0.250 | 0.400 | 0.010 | 0.016 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 0.750 | 0.900 | 0.030 | 0.035 |
| E | 1.100 | 1.300 | 0.043 | 0.051 |
| E1 | 1.500 | 1.700 | 0.059 | 0.067 |
| E2 | 0.200 REF | | 0.008 REF | |
| L | 0.010 | 0.070 | 0.001 | 0.003 |
| theta | 7°REF | | 7°REF | |

SOD-523 Package Zener Diode Ordering Information:

| Part Number | Component Package | Shipping |
|---------------------------|-------------------|-----------------------------------|
| BZX584C2V4~BZX584C75 V | SOD-523 | Tape & Reel 8000 PCS / 7" Reel |

