



BZX584C2V4 THRU BZX584C75V

Zener Diode

Features

High reliability
Very sharp reverse characteristic
Low reverse current level
Zener Voltage 2.4V~47V

Mechanical Data

Package: SOD523

Terminals: Tin plated leads, solderable per
J-STD-002 and JESD22-B102

Polarity: Cathode line denotes the cathode end

Maximum Ratings ($T_a=25$ Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | VALUE |
|-------------------------------|-----------|----------------|----------|
| Power Dissipation at $T_a=25$ | P_D | mW | 200 |
| Storage Temperature Range | T_{stg} | °C | -55~+150 |
| Maximum Junction Temperature | T_J | °C | -55~+150 |
| Maximum Regulator Current | P | $I_{ZM2M2M2M}$ | |



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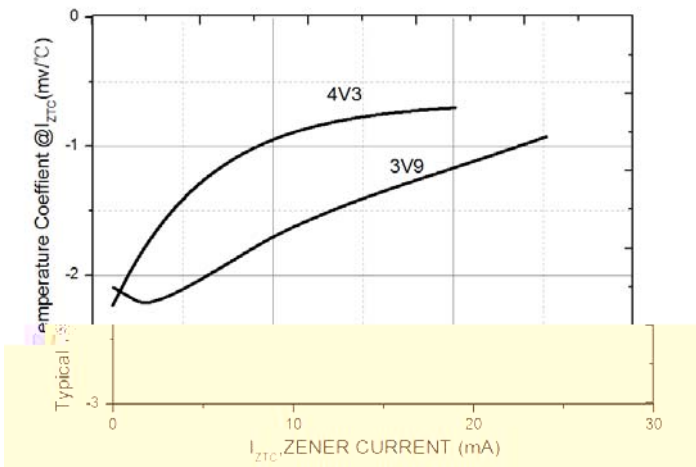
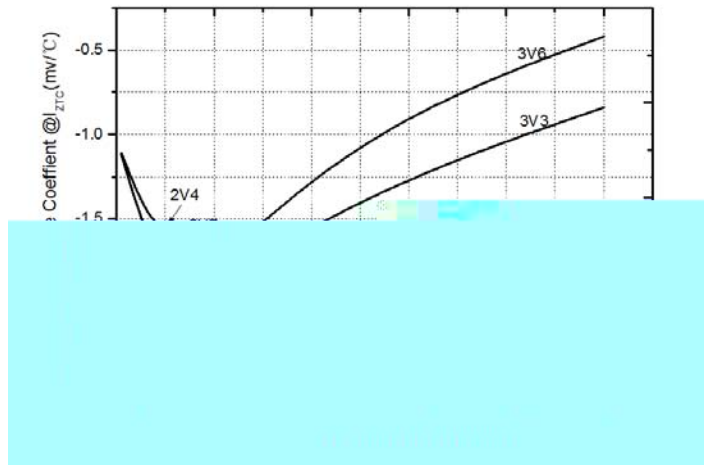
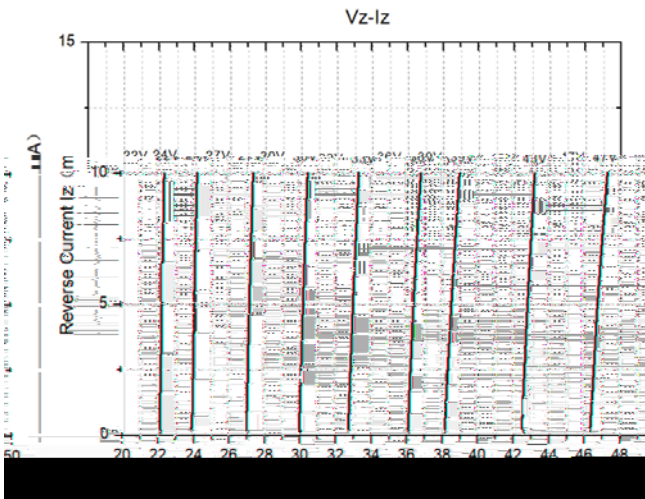
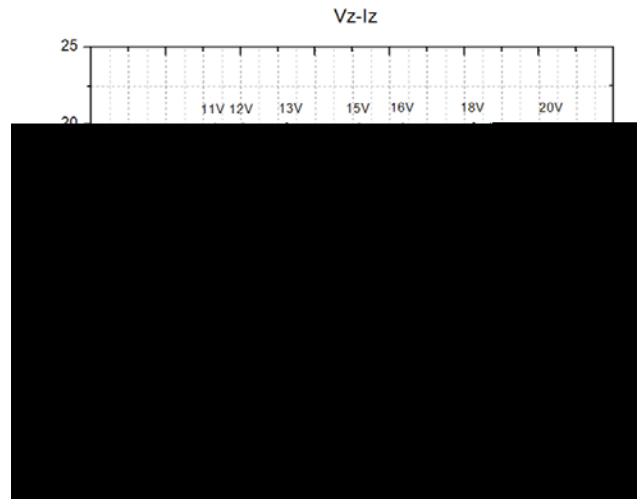
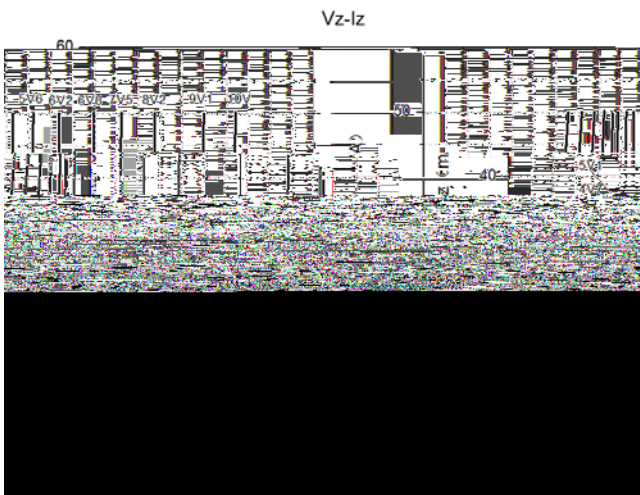
Electrical Characteristics $T_a=25$ Unless otherwise specified

| Type Number | Device Marking | V_z at I_{zT} (V) | | | Z_{zt} () | | Z_{zk} () | | $I_R(\mu A)@V_R$ | |
|-------------|----------------|-----------------------|------|------|--------------|------|--------------|------|------------------|----------|
| | | min. | typ. | max. | $I_{zT}(mA)$ | max. | $I_{zk}(mA)$ | max. | max | $V_R(V)$ |
| BZX584C2V4 | 50 | 2.28 | 2.4 | 2.52 | 5 | 100 | 1 | 1000 | 50 | 1 |
| BZX584C2V7 | 51 | 2.57 | 2.7 | 2.84 | 5 | 100 | 1 | 1000 | 20 | 1 |
| BZX584C3V0 | 52 | 2.85 | 3 | 3.15 | 5 | 100 | 1 | 1000 | 10 | 1 |
| BZX584C3V3 | 53 | 3.14 | 3.3 | 3.47 | 5 | 95 | 1 | 1000 | 5 | 1 |
| BZX584C3V6 | 54 | 3.42 | 3.6 | 3.78 | 5 | 90 | 1 | 1000 | 5 | 1 |
| BZX584C3V9 | 55 | 3.71 | 3.9 | 4.1 | 5 | 90 | 1 | 1000 | 3 | 1 |
| BZX584C4V3 | 56 | 4.09 | 4.3 | 4.52 | 5 | 90 | 1 | 1000 | 3 | 1 |
| BZX584C4V7 | 57 | 4.47 | 4.7 | 4.94 | 5 | 80 | 1 | 800 | 3 | 2 |
| BZX584C5V1 | 58 | 4.85 | 5.1 | 5.36 | 5 | 60 | 1 | 500 | 2 | 2 |
| BZX584C5V6 | 59 | 5.32 | 5.6 | 5.88 | 5 | 40 | 1 | 200 | 1 | 2 |
| BZX584C6V2 | 5A | 5.8 | 6.2 | 6.6 | 5 | 10 | 1 | 100 | 3 | 4 |
| BZX584C6V8 | 5B | 6.4 | 6.8 | 7.2 | 5 | 15 | 1 | 160 | 2 | 4 |
| BZX584C7V5 | 5C | 7 | 7.5 | 7.9 | 5 | 15 | 1 | 160 | 1 | 5 |
| BZX584C8V2 | 5D | 7.7 | 8.2 | 8.7 | 5 | 15 | 1 | 160 | 0.7 | 5 |
| BZX584C9V1 | 5E | 8.5 | 9.1 | 9.6 | 5 | 15 | 1 | 160 | 0.2 | 7 |
| BZX584C10V | 5F | 9.4 | 10 | 10.6 | 5 | 20 | 1 | 160 | 0.1 | 8 |
| BZX584C11V | 5G | 10.4 | 11 | 11.6 | 5 | 20 | 1 | 160 | 0.1 | 8 |
| BZX584C12V | 5H | 11.4 | 12 | 12.7 | 5 | 25 | 1 | 80 | 0.1 | 8 |
| BZX584C13V | 5J | 12.4 | 13 | 14.1 | 5 | 30 | 1 | 80 | 0.1 | 8 |
| BZX584C15V | 5K | 14.3 | 15 | 15.6 | 5 | 30 | 1 | 80 | 0.05 | 10.5 |
| BZX584C16V | 5L | 15.3 | 16 | 17.1 | 5 | 40 | 1 | 80 | 0.05 | 11.2 |
| BZX584C18V | 5M | 16.8 | 18 | 19.1 | 5 | 45 | 1 | 80 | 0.05 | 12.6 |
| BZX584C20V | 5N | 18.8 | 20 | 21.2 | 5 | 55 | 1 | 100 | 0.05 | 14 |
| BZX584C22V | 5P | 20.8 | 22 | 23.3 | 5 | 55 | 1 | 100 | 0.05 | 15.4 |
| BZX584C24V | 5R | 22.8 | 24 | 25.6 | 5 | 70 | 1 | 120 | 0.05 | 16.8 |
| BZX584C27V | 5S | 25.1 | 27 | 28.9 | 2 | 80 | 0.5 | 300 | 0.05 | 18.9 |
| BZX584C30V | 5T | 28 | 30 | 32 | 2 | 80 | 0.5 | 300 | 0.05 | 21 |
| BZX584C33V | 5U | 31 | 33 | 35 | 2 | 80 | 0.5 | 300 | 0.05 | 23.2 |
| BZX584C36V | 5V | 34 | 36 | 38 | 2 | 90 | 0.5 | 500 | 0.05 | 25.2 |
| BZX584C39V | 5X | 37 | 39 | 41 | 2 | 130 | 0.5 | 500 | 0.05 | 27.3 |
| BZX584C43V | 5Y | 40 | 43 | 46 | 2 | 150 | 0.5 | 500 | 0.05 | 30.1 |
| BZX584C47V | 5Z | 44 | 47 | 50 | 2 | 170 | 0.5 | 500 | 0.05 | 32.9 |
| BZX584C51V | Y17 | 48 | 51 | 54 | 2 | 180 | 0.5 | 400 | 0.05 | 35.7 |
| BZX584C56V | Y18 | 53 | 56 | 59 | 2 | 200 | 1 | 1000 | 0.1 | 42 |
| BZX584C62V | Y19 | 58 | 62 | 66 | 2 | 215 | 0.5 | 450 | 0.05 | 43.4 |
| BZX584C68V | Y20 | 64 | 68 | 72 | 2 | 240 | 0.5 | 475 | 0.05 | 47.6 |
| BZX584C75V | Y21 | 70 | 75 | 79 | 2 | 255 | 0.5 | 500 | 0.05 | 52.5 |



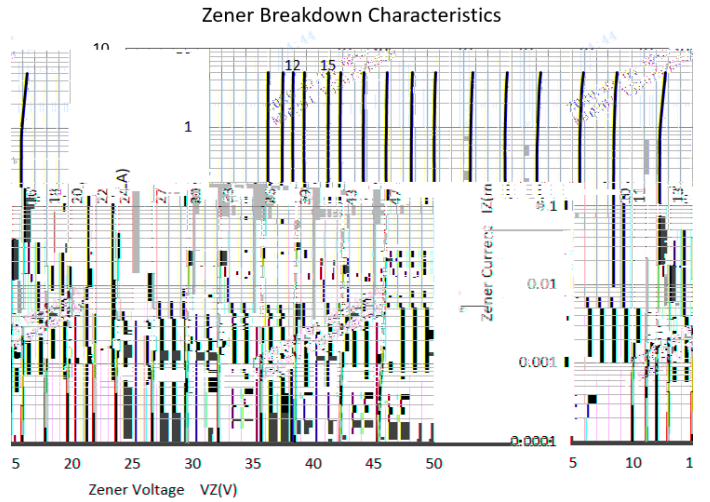
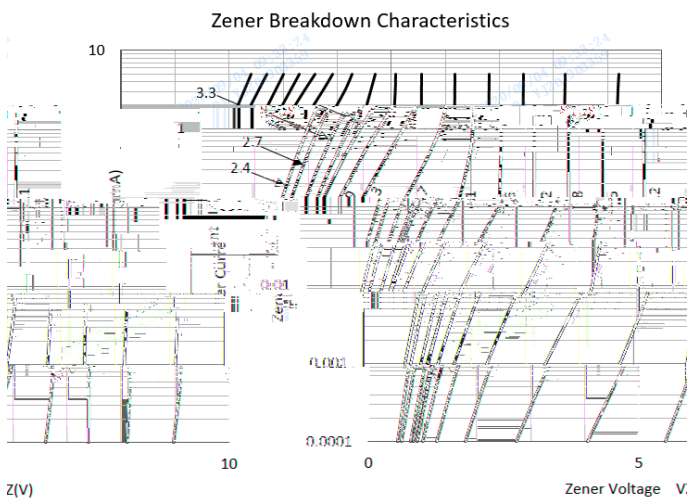
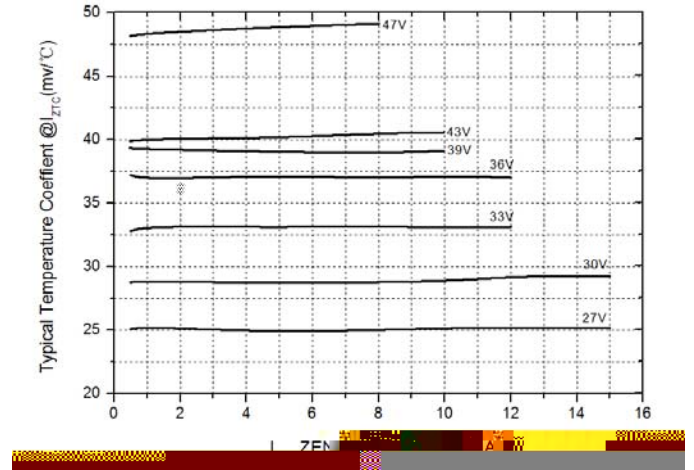
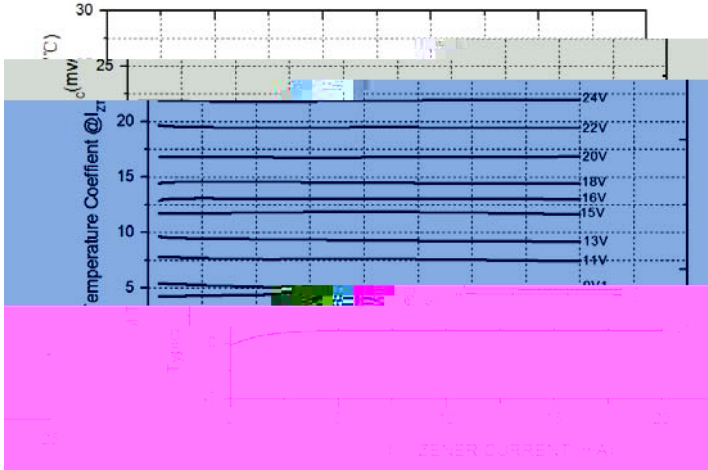
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Characteristics (Typical)





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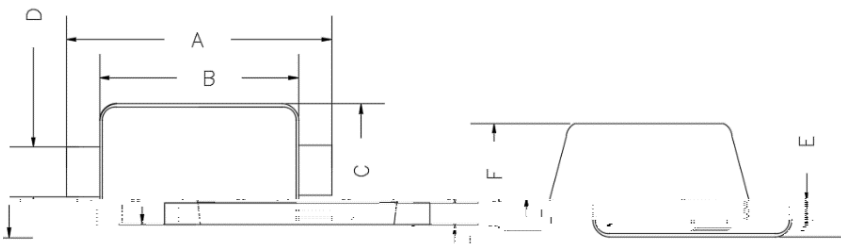




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Outline Dimensions

SOD-523



SIDE VIEW

TOP VIEW

| DIMENSIONS | | | | |
|------------|--------|-------|-------|-------|
| DIM | INCHES | | MM | |
| | MIN | MAX | MIN | MAX |
| A | 0.059 | 0.067 | 1.500 | 1.700 |
| B | 0.043 | 0.051 | 1.100 | 1.300 |
| C | 0.028 | 0.035 | 0.700 | 0.900 |
| D | 0.010 | 0.014 | 0.250 | 0.350 |
| E | 0.002 | 0.008 | 0.050 | 0.200 |
| F | 0.020 | 0.028 | 0.500 | 0.700 |

Soldering Footprint



UNIT: mm

UT SUGGESTED SOLDER PAD LAYO



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Disclaimer

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