



BZT52-C2V4 SERIES

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 2.4 to 75 Volt **POWER** 410 mWatt

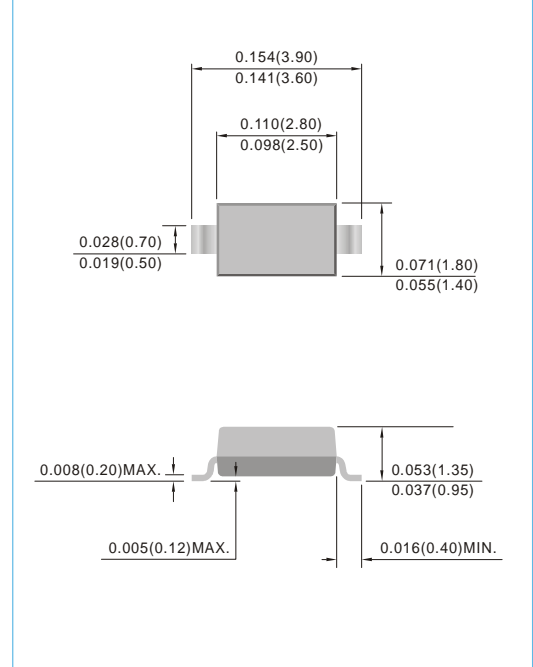
SOD-123 Unit : inch(mm)

FEATURES

- Planar Die construction
- 410mW Power Dissipation
- Zener Voltages from 2.4~75V
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.0004 ounces, 0.01 grams

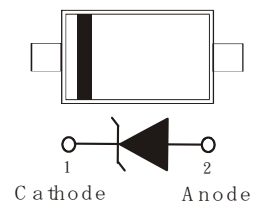


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| PARAMETER | SYMBOL | VALUE | UNITS |
|--|----------------|-------------|-------|
| Maximum Power Dissipation (Note A) at 25°C | P _D | 410 | mW |
| Operating Junction Temperature and Storage Temperature Range | T _J | -55 to +150 | °C |

NOTES:

A. Mounted on 5mm²(0.013mm thick) land areas.





BZT52-C2V4 SERIES

| Part Number | Nominal Zener Voltage | | | Max. Zener Impedance | | | | Max Reverse Leakage Current | | Marking Code |
|--------------------------------|----------------------------------|--------|--------|-----------------------------------|-----|-----------------------------------|------|---------------------------------|------|--------------|
| | V _Z @ I _{ZT} | | | Z _{ZT} @ I _{ZT} | | Z _{ZK} @ I _{ZK} | | I _R @ V _R | | |
| | Nom. V | Min. V | Max. V | Ω | mA | Ω | mA | μA | V | |
| 410 mWatts Zener Diodes | | | | | | | | | | |
| BZT52-C2V4 | 2.4 | 2.28 | 2.52 | 85 | 5.0 | 600 | 1.00 | 100 | 1.0 | W1 |
| BZT52-C2V7 | 2.7 | 2.57 | 2.84 | 83 | 5.0 | 600 | 1.00 | 75 | 1.0 | W2 |
| BZT52-C3 | 3.0 | 2.85 | 3.15 | 95 | 5.0 | 600 | 1.00 | 50 | 1.0 | W3 |
| BZT52-C3V3 | 3.3 | 3.14 | 3.47 | 95 | 5.0 | 600 | 1.00 | 25 | 1.0 | W4 |
| BZT52-C3V6 | 3.6 | 3.42 | 3.78 | 95 | 5.0 | 600 | 1.00 | 15 | 1.0 | W5 |
| BZT52-C3V9 | 3.9 | 3.71 | 4.10 | 95 | 5.0 | 600 | 1.00 | 10 | 1.0 | W6 |
| BZT52-C4V3 | 4.3 | 4.09 | 4.52 | 95 | 5.0 | 600 | 1.00 | 5.0 | 1.0 | W7 |
| BZT52-C4V7 | 4.7 | 4.47 | 4.94 | 78 | 5.0 | 500 | 1.00 | 5.0 | 1.0 | W8 |
| BZT52-C5V1 | 5.1 | 4.85 | 5.36 | 60 | 5.0 | 480 | 1.00 | 0.1 | 0.8 | W9 |
| BZT52-C5V6 | 5.6 | 5.32 | 5.88 | 40 | 5.0 | 400 | 1.00 | 0.1 | 1.0 | WA |
| BZT52-C6V2 | 6.2 | 5.89 | 6.51 | 10 | 5.0 | 150 | 1.00 | 0.1 | 2.0 | WB |
| BZT52-C6V8 | 6.8 | 6.46 | 7.14 | 8 | 5.0 | 80 | 1.00 | 0.1 | 3.0 | WC |
| BZT52-C7V5 | 7.5 | 7.13 | 7.88 | 7 | 5.0 | 80 | 1.00 | 0.1 | 5.0 | WD |
| BZT52-C8V2 | 8.2 | 7.79 | 8.61 | 7 | 5.0 | 80 | 1.00 | 0.1 | 6.0 | WE |
| BZT52-C8V7 | 8.7 | 8.27 | 9.14 | 7 | 5.0 | 100 | 1.00 | 0.1 | 6.5 | 87C |
| BZT52-C9V1 | 9.1 | 8.65 | 9.56 | 10 | 5.0 | 100 | 1.00 | 0.1 | 7.0 | WF |
| BZT52-C10 | 10 | 9.50 | 10.50 | 15 | 5.0 | 150 | 1.00 | 0.1 | 7.5 | WG |
| BZT52-C11 | 11 | 10.45 | 11.55 | 20 | 5.0 | 150 | 1.00 | 0.1 | 8.5 | WH |
| BZT52-C12 | 12 | 11.40 | 12.60 | 20 | 5.0 | 150 | 1.00 | 0.1 | 9.0 | WI |
| BZT52-C13 | 13 | 12.35 | 13.65 | 25 | 5.0 | 170 | 1.00 | 0.1 | 10.0 | WK |
| BZT52-C14 | 14 | 13.30 | 14.70 | 25 | 5.0 | 170 | 1.00 | 0.1 | 10.5 | WJ |
| BZT52-C15 | 15 | 14.25 | 15.75 | 30 | 5.0 | 200 | 1.00 | 0.1 | 11.0 | WL |
| BZT52-C16 | 16 | 15.20 | 16.80 | 40 | 5.0 | 200 | 1.00 | 0.1 | 12.0 | WM |
| BZT52-C17 | 17 | 16.15 | 17.85 | 40 | 5.0 | 200 | 1.00 | 0.1 | 13.0 | 17C |
| BZT52-C18 | 18 | 17.10 | 18.90 | 50 | 5.0 | 225 | 1.00 | 0.1 | 14.0 | WN |
| BZT52-C20 | 20 | 19.00 | 21.00 | 50 | 5.0 | 225 | 1.00 | 0.1 | 15.0 | WO |
| BZT52-C22 | 22 | 20.90 | 23.10 | 55 | 5.0 | 250 | 1.00 | 0.1 | 17.0 | WP |
| BZT52-C24 | 24 | 22.80 | 25.20 | 80 | 5.0 | 250 | 1.00 | 0.1 | 18.0 | WR |
| BZT52-C27 | 27 | 25.65 | 28.35 | 80 | 5.0 | 300 | 1.00 | 0.1 | 20.0 | WS |
| BZT52-C28 | 28 | 26.60 | 29.40 | 80 | 5.0 | 300 | 1.00 | 0.1 | 22.0 | 28C |
| BZT52-C30 | 30 | 28.50 | 31.50 | 80 | 5.0 | 300 | 1.00 | 0.1 | 22.5 | WT |
| BZT52-C33 | 33 | 31.35 | 34.65 | 80 | 5.0 | 325 | 1.00 | 0.1 | 25.0 | WU |
| BZT52-C36 | 36 | 34.20 | 37.80 | 90 | 5.0 | 350 | 1.00 | 0.1 | 27.0 | WW |
| BZT52-C39 | 39 | 37.05 | 40.95 | 90 | 5.0 | 350 | 1.00 | 0.1 | 29.0 | WX |
| BZT52-C43 | 43 | 40.85 | 45.15 | 100 | 5.0 | 375 | 1.00 | 0.1 | 32.0 | WY |
| BZT52-C47 | 47 | 44.65 | 49.35 | 100 | 5.0 | 375 | 1.00 | 0.1 | 35.0 | WZ |
| BZT52-C51 | 51 | 48.45 | 53.55 | 100 | 5.0 | 400 | 1.00 | 0.1 | 38.0 | XA |
| BZT52-C56 | 56 | 53.20 | 58.80 | 135 | 2.5 | 1000 | 1.00 | 0.1 | 42.0 | X2 |
| BZT52-C62 | 62 | 58.90 | 65.10 | 150 | 2.5 | 1000 | 1.00 | 0.1 | 46.0 | X3 |
| BZT52-C68 | 68 | 64.60 | 71.40 | 200 | 2.5 | 1000 | 1.00 | 0.1 | 51.0 | X4 |
| BZT52-C75 | 75 | 71.25 | 78.75 | 250 | 2.5 | 1000 | 1.00 | 0.1 | 56.0 | X5 |



BZT52-C2V4 SERIES

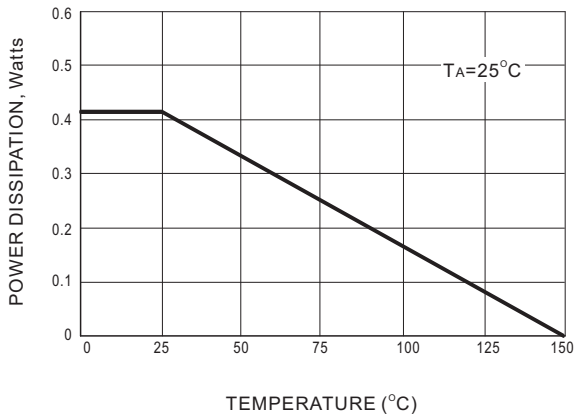


Fig.1 STEADY STATE POWER DERATING

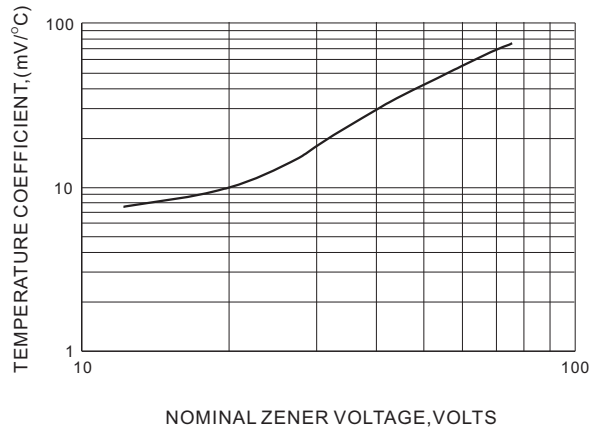


Fig.2 TEMPERATURE COEFFICIENTS

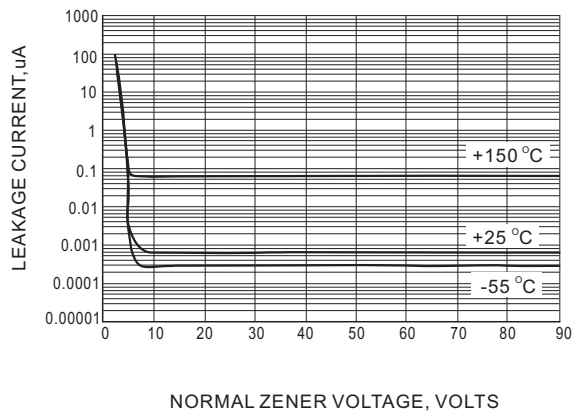


Fig.3 TYPICAL LEAKAGE CURRENT

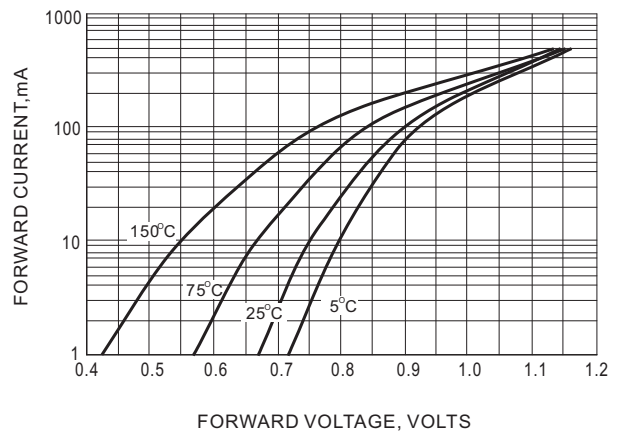
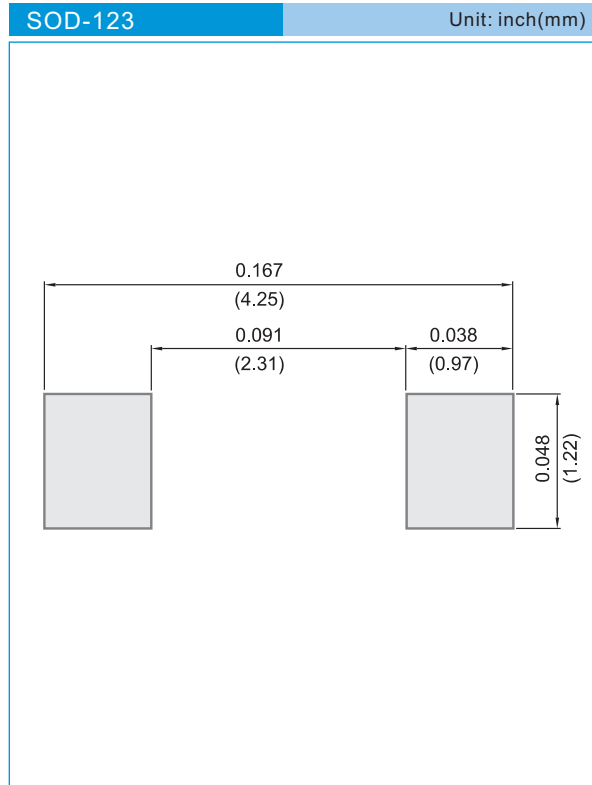


Fig.4 TYPICAL FORWARD VOLTAGE



BZT52-C2V4 SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



BZT52-C2V4 SERIES

Part No_packing code_Version

BZT52-C2V4_R1_00001

BZT52-C2V4_R2_00001

For example :

RB500V-40_R2_00001



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |



BZT52-C2V4 SERIES

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.