

BZQ55-C2V4 SERIES

SURFACE MOUNT ZENER DIODES

VOLTAGE 2.4 to 75 Volts

POWER 500 mWatts

QUADRO-MELF

Unit : inch(mm)

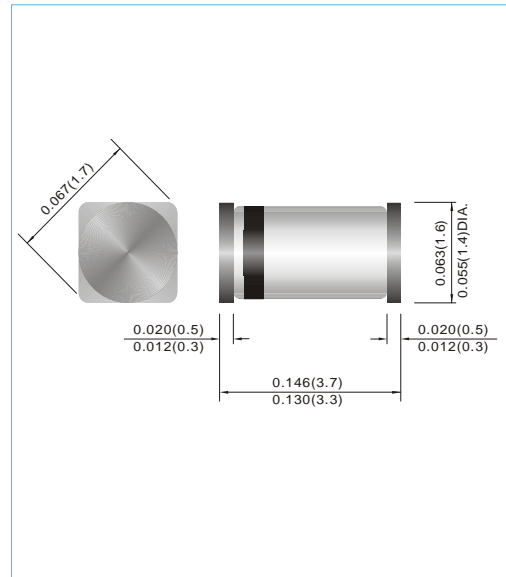
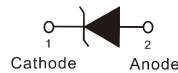
FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: Molded Glass QUADRO-MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.008 grams
- Mounting Position: Any
- Packing information

T/R - 2.5K per 7" plastic Reel



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Parameter | Symbol | Value | Units |
|---|-----------|-------------|------------------|
| Power Dissipation at $T_A = 25^\circ\text{C}$ | P_{TOT} | 500 | mW |
| Junction Temperature | T_J | 175 | $^\circ\text{C}$ |
| Storage Temperature Range | T_S | -65 to +175 | $^\circ\text{C}$ |

Valid provided that leads at a distance of 8mm from case are kept at ambient temperature.

| Parameter | Symbol | Min. | Typ. | Max. | Units |
|--|-----------------|------|------|------|----------------------------|
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$ | -- | -- | 0.3 | $^\circ\text{C}/\text{mW}$ |
| Forward Voltage at $I_F = 200\text{mA}$ | V_F | -- | -- | 1.5 | V |

Valid provided that leads at a distance of 8mm from case are kept at ambient temperature.

BZQ55-C2V4 SERIES

| Part Number | Nominal Zener Voltage | | | Max. Zener Impedance | | | | Max Reverse Leakage Current | |
|-------------|-----------------------|--------|--------|----------------------|-----|-----------|-----|-----------------------------|-----|
| | Vz @ IzT | | | ZzT @ IzT | | Zzk @ Izk | | Ir @ Vr | |
| | Nom. V | Min. V | Max. V | Ω | mA | Ω | mA | uA | V |
| BZQ55-C2V4 | 2.4 | 2.28 | 2.56 | 85 | 5 | 600 | 1 | 50 | 1 |
| BZQ55-C2V7 | 2.7 | 2.5 | 2.9 | 85 | 5 | 600 | 1 | 10 | 1 |
| BZQ55-C3V0 | 3 | 2.8 | 3.2 | 85 | 5 | 600 | 1 | 4 | 1 |
| BZQ55-C3V3 | 3.3 | 3.1 | 3.5 | 85 | 5 | 600 | 1 | 2 | 1 |
| BZQ55-C3V6 | 3.6 | 3.4 | 3.8 | 85 | 5 | 600 | 1 | 2 | 1 |
| BZQ55-C3V9 | 3.9 | 3.7 | 4.1 | 85 | 5 | 600 | 1 | 2 | 1 |
| BZQ55-C4V3 | 4.3 | 4 | 4.6 | 75 | 5 | 600 | 1 | 1 | 1 |
| BZQ55-C4V7 | 4.7 | 4.4 | 5 | 60 | 5 | 600 | 1 | 0.5 | 1 |
| BZQ55-C5V1 | 5.1 | 4.8 | 5.4 | 35 | 5 | 550 | 1 | 0.1 | 1 |
| BZQ55-C5V6 | 5.6 | 5.2 | 6 | 25 | 5 | 450 | 1 | 0.1 | 1 |
| BZQ55-C6V2 | 6.2 | 5.8 | 6.6 | 10 | 5 | 200 | 1 | 0.1 | 2 |
| BZQ55-C6V8 | 6.8 | 6.4 | 7.2 | 8 | 5 | 150 | 1 | 0.1 | 3 |
| BZQ55-C7V5 | 7.5 | 7 | 7.9 | 7 | 5 | 50 | 1 | 0.1 | 5 |
| BZQ55-C8V2 | 8.2 | 7.7 | 8.7 | 7 | 5 | 50 | 1 | 0.1 | 6 |
| BZQ55-C9V1 | 9.1 | 8.5 | 9.6 | 10 | 5 | 50 | 1 | 0.1 | 7 |
| BZQ55-C10 | 10 | 9.4 | 10.6 | 15 | 5 | 70 | 1 | 0.1 | 7.5 |
| BZQ55-C11 | 11 | 10.4 | 11.6 | 20 | 5 | 70 | 1 | 0.1 | 8.5 |
| BZQ55-C12 | 12 | 11.4 | 12.7 | 20 | 5 | 90 | 1 | 0.1 | 9 |
| BZQ55-C13 | 13 | 12.4 | 14.1 | 26 | 5 | 110 | 1 | 0.1 | 10 |
| BZQ55-C15 | 15 | 13.8 | 15.6 | 30 | 5 | 110 | 1 | 0.1 | 11 |
| BZQ55-C16 | 16 | 15.3 | 17.1 | 40 | 5 | 170 | 1 | 0.1 | 12 |
| BZQ55-C18 | 18 | 16.8 | 19.1 | 50 | 5 | 170 | 1 | 0.1 | 14 |
| BZQ55-C20 | 20 | 18.8 | 21.2 | 55 | 5 | 220 | 1 | 0.1 | 15 |
| BZQ55-C22 | 22 | 20.8 | 23.3 | 55 | 5 | 220 | 1 | 0.1 | 17 |
| BZQ55-C24 | 24 | 22.8 | 25.6 | 80 | 5 | 220 | 1 | 0.1 | 18 |
| BZQ55-C27 | 27 | 25.1 | 28.9 | 80 | 5 | 220 | 1 | 0.1 | 20 |
| BZQ55-C30 | 30 | 28 | 32 | 80 | 5 | 220 | 1 | 0.1 | 22 |
| BZQ55-C33 | 33 | 31 | 35 | 80 | 5 | 220 | 1 | 0.1 | 24 |
| BZQ55-C36 | 36 | 34 | 38 | 80 | 5 | 220 | 1 | 0.1 | 27 |
| BZQ55-C39 | 39 | 37 | 41 | 90 | 2.5 | 500 | 0.5 | 0.1 | 30 |
| BZQ55-C43 | 43 | 40 | 46 | 90 | 2.5 | 600 | 0.5 | 0.1 | 33 |
| BZQ55-C47 | 47 | 44 | 50 | 110 | 2.5 | 700 | 0.5 | 0.1 | 36 |
| BZQ55-C51 | 51 | 48 | 54 | 125 | 2.5 | 700 | 0.5 | 0.1 | 39 |
| BZQ55-C56 | 56 | 52 | 60 | 135 | 2.5 | 1000 | 0.5 | 0.1 | 43 |
| BZQ55-C62 | 62 | 58 | 66 | 150 | 2.5 | 1000 | 0.5 | 0.1 | 47 |
| BZQ55-C68 | 68 | 64 | 72 | 200 | 2.5 | 1000 | 0.5 | 0.1 | 51 |
| BZQ55-C75 | 75 | 70 | 79 | 250 | 2.5 | 1500 | 0.5 | 0.1 | 56 |

Notes.

STANDARD VOLTAGE TOLERANCE IS + 5% AND :

SUFFIX " A " FOR + 1%

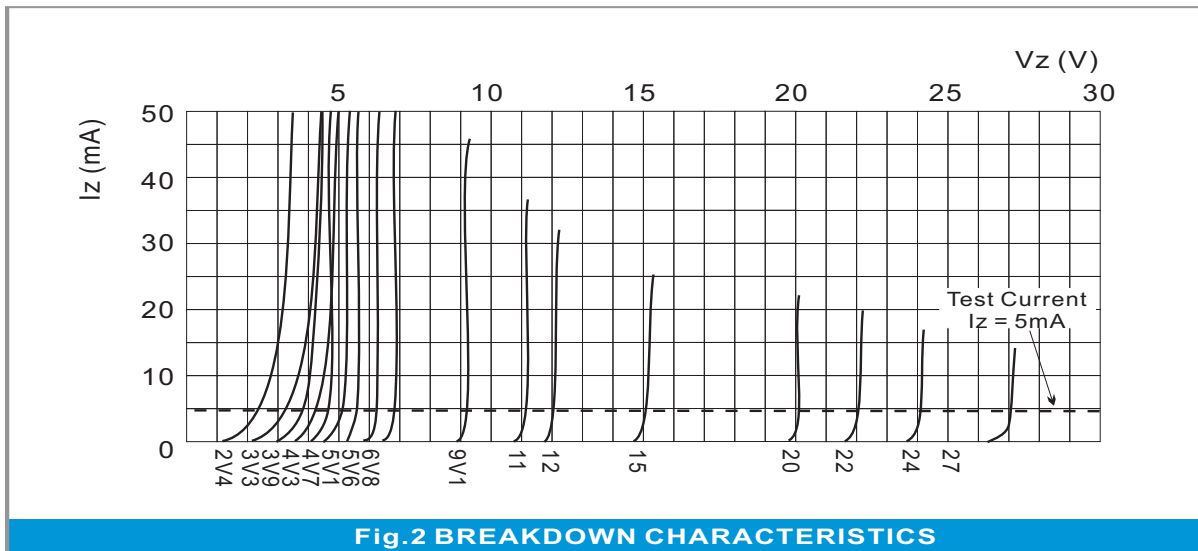
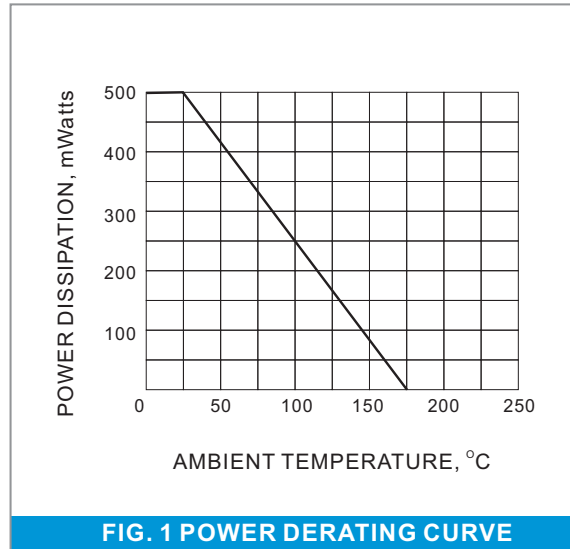
SUFFIX " B " FOR + 2%

SUFFIX " C " FOR + 5%

SUFFIX " D " FOR + 20%

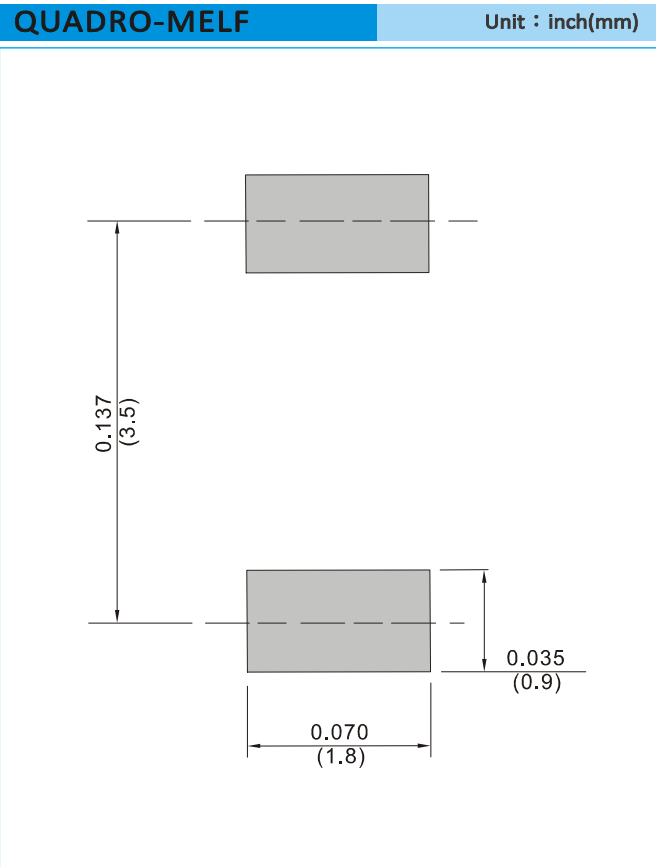
BZQ55-C2V4 SERIES

RATING AND CHARACTERISTIC CURVES



BZQ55-C2V4 SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 2.5K per 7" plastic Reel

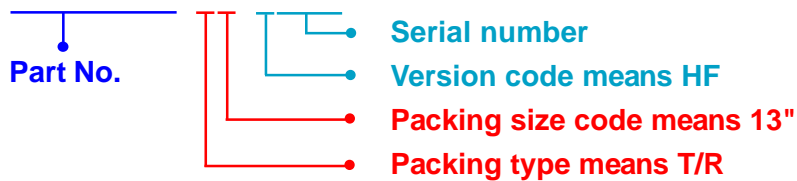
BZQ55-C2V4 SERIES

Part No_packing code_Version

BZQ55-C2V4_R2_10001

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 | | | |

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