



BZT52-C2V4FN2 SERIES

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 2.4~33 Volt **POWER** 250 mWatt

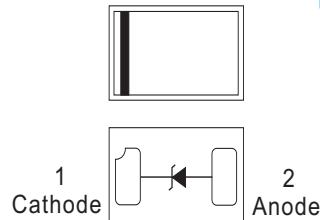
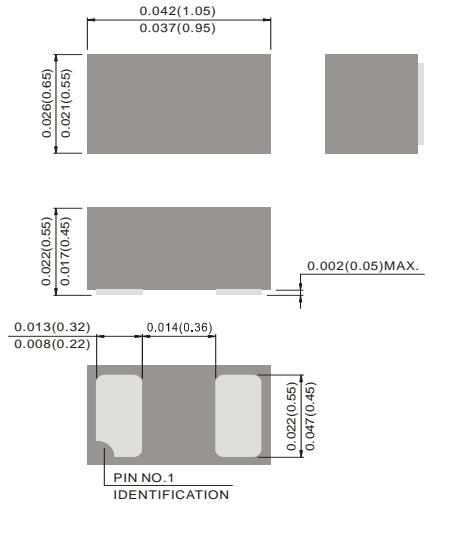
FEATURES

- Planar Die construction
- 250mW Power Dissipation
- Zener Voltages from 2.4~33V
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: DFN-2L, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00004 ounces, 0.0011 grams
- Polarity:Color band denotes cathode end

DFN 2L Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

| Parameter | Symbol | | Value | | Units |
|--|------------------|--|-------------|--|-------|
| Power Dissipation | PD | | 250 | | mW |
| Thermal resistance Junction to Ambient (Note 1) | R _{θJA} | | 500 | | °C/W |
| Operating Junction Temperature and Storage Temperature Range | T _J | | -55 to +150 | | °C |

| Part Number | Nominal Zener Voltage | | | Max. Zener Impedance | | | | Max Reverse Leakage Current | | Marking Code | |
|-------------------------|-----------------------|--------|--------|-----------------------------------|-----|-----------------------------------|------|---------------------------------|------|--------------|--|
| | Vz @ 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 | | |
| 250 mWatts Zener Diodes | | | | | | | | | | | |
| BZT52-C2V4FN2 | 2.4 | 2.28 | 2.52 | 100 | 5.0 | 400 | 1.00 | 50 | 1 | W1 | |
| BZT52-C6V8FN2 | 6.8 | 6.46 | 7.14 | 15 | 5.0 | 80 | 1.00 | 2.0 | 4.0 | WC | |
| BZT52-C33FN2 | 33 | 31.35 | 34.65 | 80 | 2.0 | 325 | 0.5 | 0.05 | 23.1 | WU | |

NOTES:

1. Mounted on 48cm² FR-4 PCB board.



BZT52-C2V4FN2 SERIES

RATING AND CHARACTERISTIC CURVES

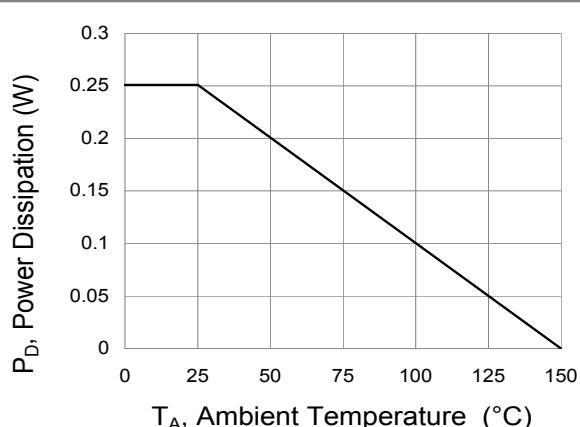


Fig.1 Power Derating Curve

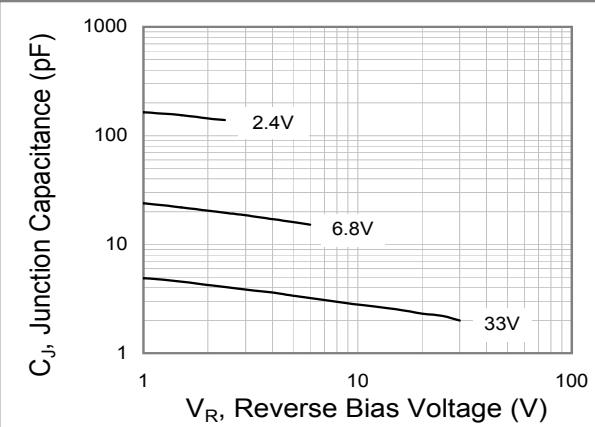


Fig.2 Typical Junction Capacitance

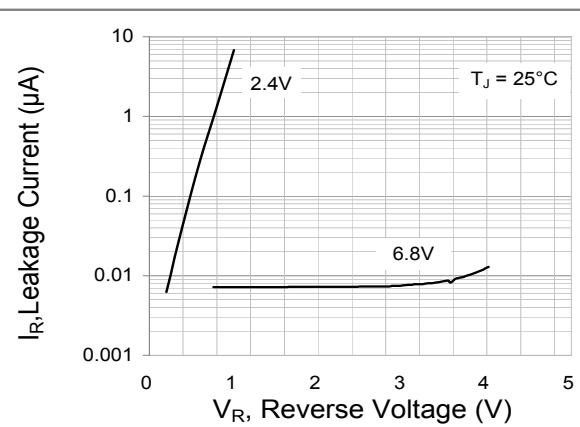


Fig.3 Typical Leakage Characteristics

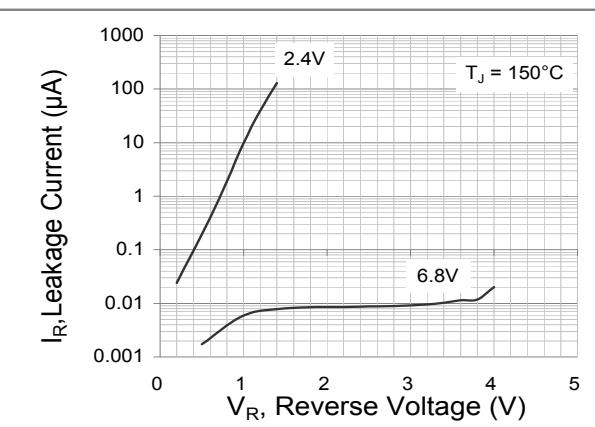


Fig.4 Typical Leakage Characteristics

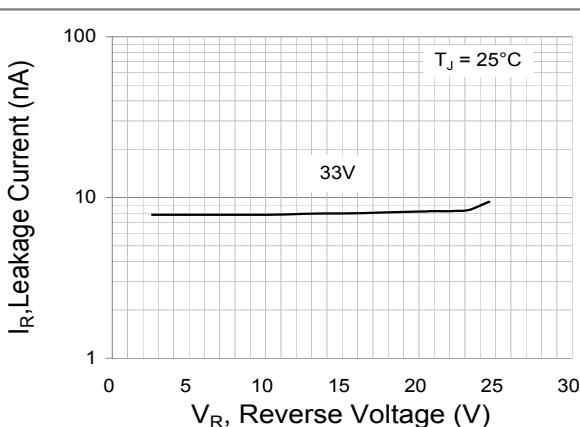


Fig.5 Typical Leakage Characteristics

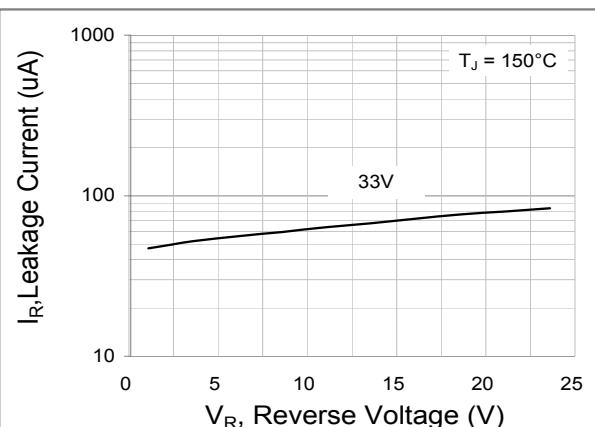


Fig.6 Typical Leakage Characteristics



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RATING AND CHARACTERISTIC CURVES

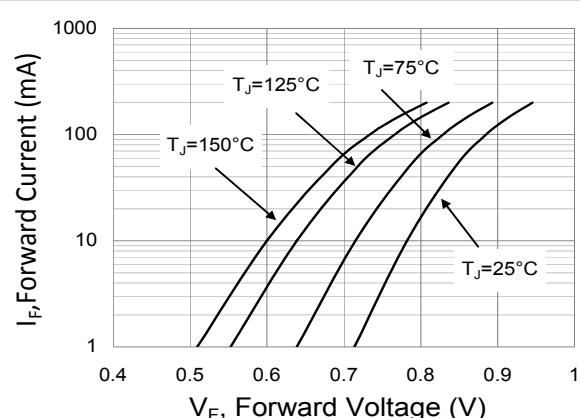


Fig.7 Typical Forward Characteristics

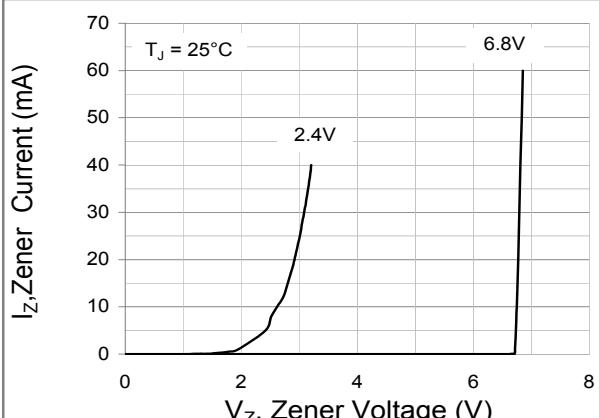


Fig.8 Typical Zener Characteristics

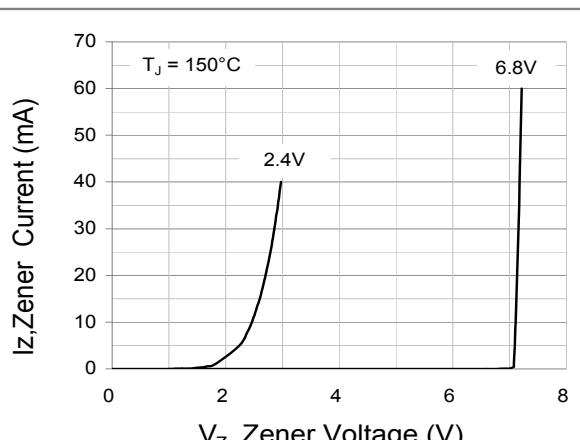


Fig.9 Typical Zener Characteristics

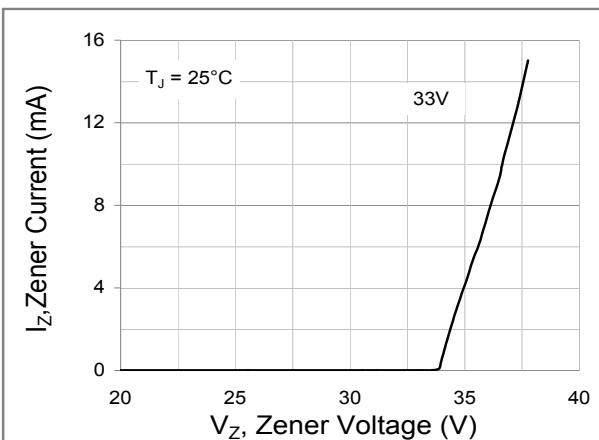


Fig.10 Typical Zener Characteristics

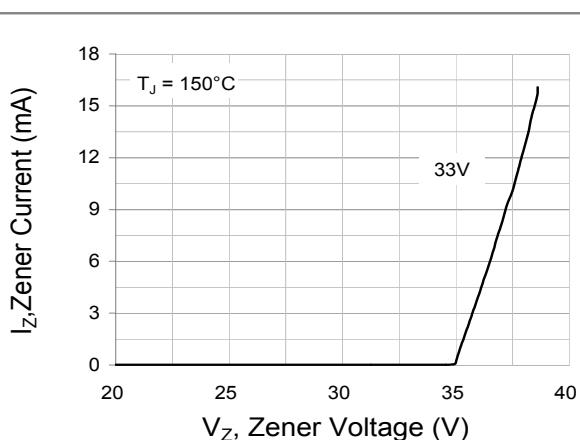


Fig.11 Typical Zener Characteristics

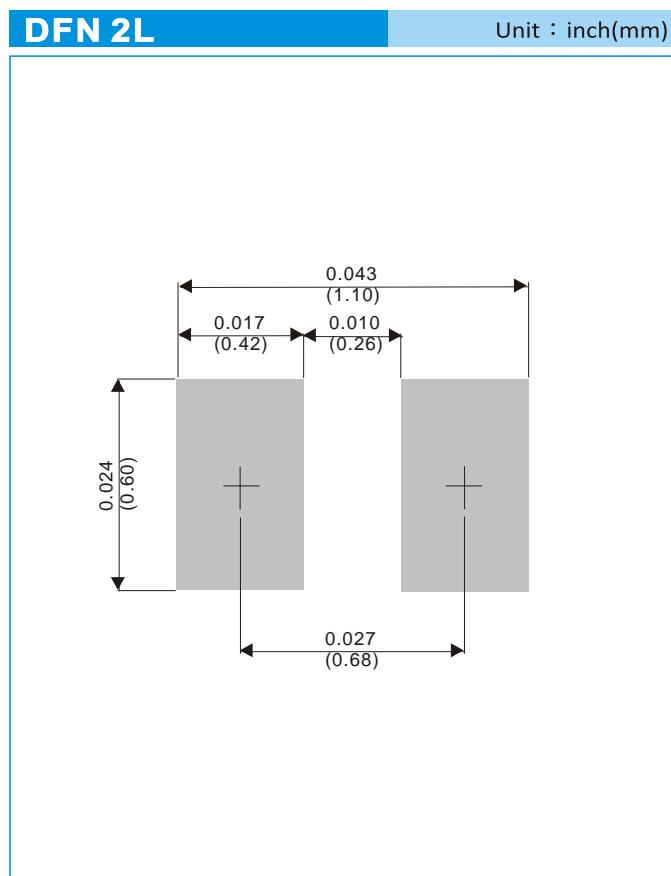


BZT52-C2V4FN2 SERIES

Part No Packing Code Version

| Part No Packing Code | Package Type | Packing Type | Marking | Version |
|------------------------|--------------|------------------|---------|--------------|
| BZT52-C2V4FN2_R1_00001 | DFN 2L | 8K pcs / 7" reel | BN | Halogen free |

MOUNTING PAD LAYOUT





BAT54FN2

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