



Micro Commercial Components

Micro Commercial Components
 20736 Marilla Street Chatsworth
 CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

BZX55-C2V4 THRU BZX55-C75

**500 mWatt
 Zener Diode
 2.42 to 75 Volts**

Features

- Silicon Planar Power Zener Diodes
- Glass Package

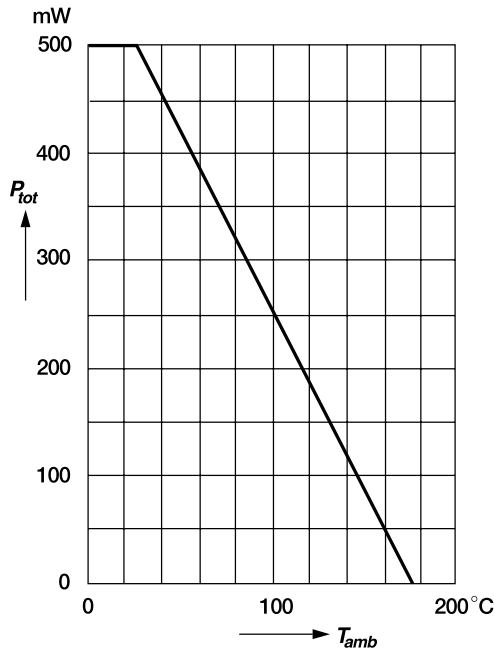
Maximum Ratings

| Symbol | Rating | Rating | Unit |
|-----------|--|--------------------|------|
| P_D | Power dissipation | 500 ⁽¹⁾ | mW |
| R_{JA} | Thermal Resistance Junction to Ambient Air | 350 ⁽¹⁾ | °C/W |
| T_J | Junction Temperature | -65 to +175 | °C |
| T_{STG} | Storage Temperature Range | -65 to +175 | °C |

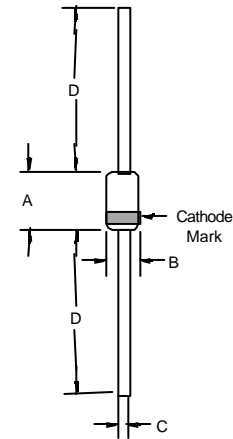
DO-35 GLASS

Admissible power dissipation versus ambient temperature

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



Note: (1) Valid provided that leads at a distance of 3/8" from case are kept at ambient temperature.



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | --- | .166 | --- | 4.2 | |
| B | --- | .079 | --- | 2.00 | |
| C | --- | .020 | --- | .52 | |
| D | 1.000 | --- | 25.40 | --- | |

BZX55-C2V4 thru BZX55-C75

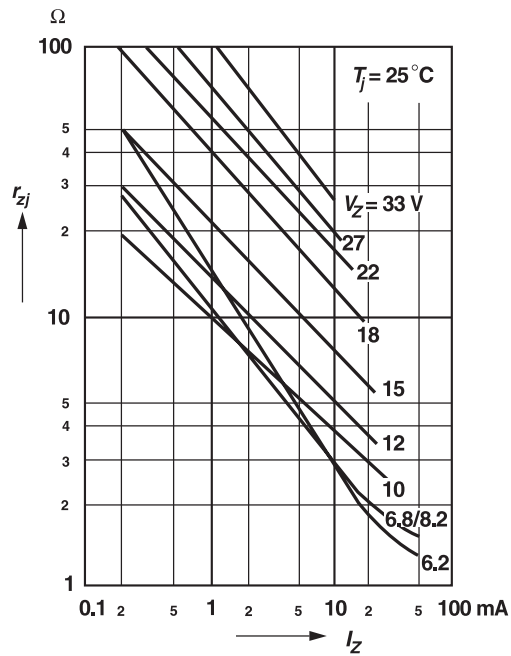
ELECTRICAL CHARACTERISTICS @25°C Maximum $V_F=1.5V$ at $I_F=200mA$

| MCC PART NUMBER | ZENER VOLTAGE RANGE ⁽¹⁾ at I_{ZT} V_Z (V) | | TEST CURRENT I_{ZT} mA | MAXIMUM DYNAMIC RESISTANCE $f=1.0kHz$ $I_Z=5.0mA$ $I_Z=1.0mA$ | | TEMP. COEFFICIENT OF ZENER VOLTAGE at $I_Z=5mA$ V_Z (%/°C) | | REVERSE LEAKAGE CURRENT I_R nA | TEST CURRENT V_R V |
|-----------------|---|------|--------------------------------|---|---------------------|--|-------|--|----------------------------|
| | MIN. | MAX. | | OHMS | OHMS | MIN. | MAX. | | |
| BZX55-C2V4 | 2.28 | 2.56 | 5.0 | 85 | 600 | -0.09 | -0.06 | 50000 | 1.0 |
| BZX55-C2V7 | 2.5 | 2.9 | 5.0 | 85 | 600 | -0.09 | -0.06 | 10000 | 1.0 |
| BZX55-C3V0 | 2.8 | 3.2 | 5.0 | 85 | 600 | -0.08 | -0.05 | 4000 | 1.0 |
| BZX55-C3V3 | 3.1 | 3.5 | 5.0 | 85 | 600 | -0.08 | -0.05 | 2000 | 1.0 |
| BZX55-C3V6 | 3.4 | 3.8 | 5.0 | 85 | 600 | -0.08 | -0.05 | 2000 | 1.0 |
| BZX55-C3V9 | 3.7 | 4.1 | 5.0 | 85 | 600 | -0.08 | -0.05 | 2000 | 1.0 |
| BZX55-C4V3 | 4.0 | 4.6 | 5.0 | 75 | 600 | -0.06 | -0.03 | 1000 | 1.0 |
| BZX55-C4V7 | 4.4 | 5.0 | 5.0 | 60 | 600 | -0.05 | +0.02 | 500 | 1.0 |
| BZX55-C5V1 | 4.8 | 5.4 | 5.0 | 35 | 550 | -0.02 | +0.02 | 100 | 1.0 |
| BZX55-C5V6 | 5.2 | 6.0 | 5.0 | 25 | 450 | -0.05 | +0.05 | 100 | 1.0 |
| BZX55-C6V2 | 5.8 | 6.6 | 5.0 | 10 | 200 | +0.03 | +0.06 | 100 | 2.0 |
| BZX55-C6V8 | 6.4 | 7.2 | 5.0 | 8.0 | 150 | +0.03 | +0.07 | 100 | 3.0 |
| BZX55-C7V5 | 7.0 | 7.9 | 5.0 | 7.0 | 50 | +0.03 | +0.07 | 100 | 5.0 |
| BZX55-C8V2 | 7.7 | 8.7 | 5.0 | 7.0 | 50 | +0.03 | +0.08 | 100 | 6.2 |
| BZX55-C9V1 | 8.5 | 9.6 | 5.0 | 10 | 50 | +0.03 | +0.09 | 100 | 6.8 |
| BZX55-C10 | 9.4 | 10.6 | 5.0 | 15 | 70 | +0.03 | +0.11 | 100 | 7.5 |
| BZX55-C11 | 10.4 | 11.6 | 5.0 | 20 | 70 | +0.03 | +0.11 | 100 | 8.2 |
| BZX55-C12 | 11.4 | 12.7 | 5.0 | 20 | 90 | +0.03 | +0.11 | 100 | 9.1 |
| BZX55-C13 | 12.4 | 14.1 | 5.0 | 26 | 110 | +0.03 | +0.11 | 100 | 10 |
| BZX55-C15 | 13.8 | 15.6 | 5.0 | 30 | 110 | +0.03 | +0.11 | 100 | 11 |
| BZX55-C16 | 15.3 | 17.1 | 5.0 | 40 | 170 | +0.03 | +0.11 | 100 | 12 |
| BZX55-C18 | 16.8 | 19.1 | 5.0 | 40 | 170 | +0.03 | +0.11 | 100 | 13 |
| BZX55-C20 | 18.8 | 21.2 | 5.0 | 55 | 220 | +0.03 | +0.11 | 100 | 15 |
| BZX55-C22 | 20.8 | 23.3 | 5.0 | 55 | 220 | +0.03 | +0.11 | 100 | 16 |
| BZX55-C24 | 22.8 | 25.6 | 5.0 | 80 | 220 | +0.04 | +0.12 | 100 | 18 |
| BZX55-C27 | 25.1 | 28.9 | 5.0 | 80 | 220 | +0.04 | +0.12 | 100 | 20 |
| BZX55-C30 | 28 | 32 | 5.0 | 80 | 220 | +0.04 | +0.12 | 100 | 22 |
| BZX55-C33 | 31 | 35 | 5.0 | 80 | 220 | +0.04 | +0.12 | 100 | 24 |
| BZX55-C36 | 34 | 38 | 5.0 | 80 | 220 | +0.04 | +0.12 | 100 | 27 |
| BZX55-C39 | 37 | 41 | 2.5 | 90 ⁽²⁾ | 500 ⁽³⁾ | +0.04 | +0.12 | 100 | 30 |
| BZX55-C43 | 40 | 46 | 2.5 | 90 ⁽²⁾ | 600 ⁽³⁾ | +0.04 | +0.12 | 100 | 33 |
| BZX55-C47 | 44 | 50 | 2.5 | 110 ⁽²⁾ | 700 ⁽³⁾ | +0.04 | +0.12 | 100 | 36 |
| BZX55-C51 | 48 | 54 | 2.5 | 125 ⁽²⁾ | 700 ⁽²⁾ | +0.04 | +0.12 | 100 | 39 |
| BZX55-C56 | 52 | 60 | 2.5 | 135 ⁽²⁾ | 1000 ⁽²⁾ | +0.04 | +0.12 | 100 | 43 |
| BZX55-C62 | 58 | 66 | 2.5 | 150 ⁽²⁾ | 1000 ⁽²⁾ | +0.04 | +0.12 | 100 | 47 |
| BZX55-C68 | 64 | 72 | 2.5 | 200 ⁽²⁾ | 1000 ⁽²⁾ | +0.04 | +0.12 | 100 | 51 |
| BZX55-C75 | 70 | 79 | 2.5 | 250 ⁽²⁾ | 1500 ⁽²⁾ | +0.04 | +0.12 | 100 | 56 |

Note: (1) Measured with pulses $t_p=5.0ms$, BZX55A-----±1% of V_{Znom} , BZX55B-----±2% of V_{Znom} , BZX55C-----±5% of V_{Znom}
(2) at $I_Z=2.5mA$
(3) at $I_Z=0.5mA$

BZX55-C2V4 thru BZX55-C75

Dynamic resistance versus Zener current



Dynamic resistance versus Zener voltage

