

Obsolete

•M•C•C•

Micro Commercial Components



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**BZX55C2V0  
THRU  
BZX55C100**

## Features

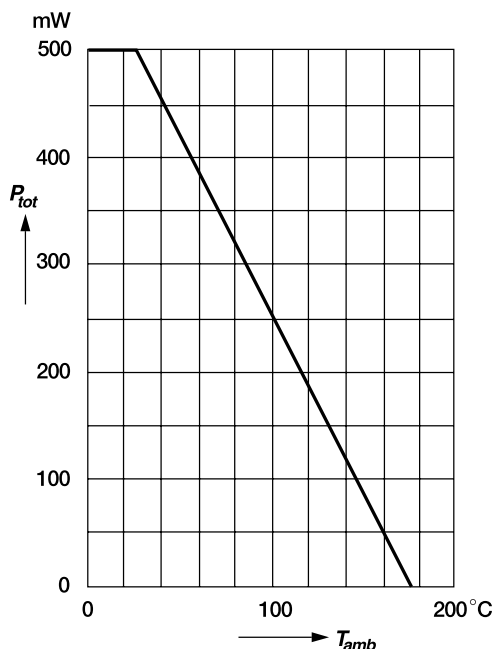
- Silicon Planar Power Zener Diodes
- Glass Package
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Moisture Sensitivity: Level 1

## Maximum Ratings

| Symbol    | Rating                                     | Rating             | Unit |
|-----------|--------------------------------------------|--------------------|------|
| $P_D$     | Power dissipation                          | 500 <sup>(2)</sup> | mW   |
| $R_{JA}$  | Thermal Resistance Junction to Ambient Air | 350 <sup>(2)</sup> | °C/W |
| $T_J$     | Junction Temperature                       | -65 to +175        | °C   |
| $T_{STG}$ | Storage Temperature Range                  | -65 to +175        | °C   |

### Admissible power dissipation versus ambient temperature

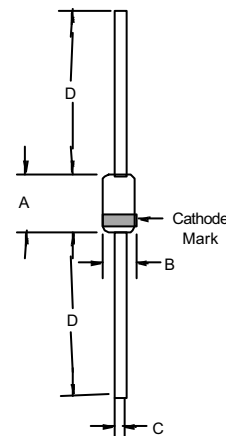
Valid provided that leads are kept ambient  
temperature at a distance of 8 mm from case.



- Note:
1. Lead in Glass Exemption Applied, see EU Directive Annex 5.
  2. Valid provided that leads at a distance of 3/8" from case are kept at ambient temperature.

**500 mWatt  
Zener Diode  
2.0V to 100 Volts**

**DO-35 GLASS**



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

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# BZX55C2V0 thru BZX55C100

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

| MCC<br>PART<br>NUMBER | ZENER VOLTAGE                           |      | TEST<br>CURRENT | MAXIMUM DYNAMIC |                  | TEST<br>CURRENT | EFFECTIVE         |                 | REVERSE<br>CURRENT | REVERSE<br>VOLTAGE |
|-----------------------|-----------------------------------------|------|-----------------|-----------------|------------------|-----------------|-------------------|-----------------|--------------------|--------------------|
|                       | RANGE <sup>(1)</sup> at I <sub>ZT</sub> |      |                 | RESISTANCE      |                  |                 | TEMP. COEFFICIENT |                 |                    |                    |
|                       | V <sub>Z</sub> (V)                      |      |                 | I <sub>ZT</sub> | @I <sub>ZT</sub> |                 | @I <sub>zk</sub>  | I <sub>ZK</sub> |                    |                    |
|                       | Min                                     | Max  | mA              | OHMS            | OHMS             | mA              | Min               | Max             | nA                 | V                  |
| BZX55C2V0             | 1.9                                     | 2.1  | 5               | 100             | 600              | 1               | -0.09             | -0.06           | 150000             | 1                  |
| BZX55C2V2             | 2.09                                    | 2.31 | 5               | 100             | 600              | 1               | -0.09             | -0.06           | 150000             | 1                  |
| BZX55C2V4             | 2.28                                    | 2.56 | 5               | 85              | 600              | 1               | -0.09             | -0.06           | 50000              | 1                  |
| BZX55C2V7             | 2.5                                     | 2.9  | 5               | 85              | 600              | 1               | -0.09             | -0.06           | 10000              | 1                  |
| BZX55C3V0             | 2.8                                     | 3.2  | 5               | 85              | 600              | 1               | -0.08             | -0.05           | 4000               | 1                  |
| BZX55C3V3             | 3.1                                     | 3.5  | 5               | 85              | 600              | 1               | -0.08             | -0.05           | 2000               | 1                  |
| BZX55C3V6             | 3.4                                     | 3.8  | 5               | 85              | 600              | 1               | -0.08             | -0.05           | 2000               | 1                  |
| BZX55C3V9             | 3.7                                     | 4.1  | 5               | 85              | 600              | 1               | -0.08             | -0.05           | 2000               | 1                  |
| BZX55C4V3             | 4                                       | 4.6  | 5               | 75              | 600              | 1               | -0.06             | -0.03           | 1000               | 1                  |
| BZX55C4V7             | 4.4                                     | 5    | 5               | 60              | 600              | 1               | -0.05             | 0.02            | 500                | 1                  |
| BZX55C5V1             | 4.8                                     | 5.4  | 5               | 35              | 550              | 1               | -0.02             | 0.02            | 100                | 1                  |
| BZX55C5V6             | 5.2                                     | 6    | 5               | 25              | 450              | 1               | -0.05             | 0.05            | 100                | 1                  |
| BZX55C6V2             | 5.8                                     | 6.6  | 5               | 10              | 200              | 1               | 0.03              | 0.06            | 100                | 2                  |
| BZX55C6V8             | 6.4                                     | 7.2  | 5               | 8               | 150              | 1               | 0.03              | 0.07            | 100                | 3                  |
| BZX55C7V5             | 7                                       | 7.9  | 5               | 7               | 50               | 1               | 0.03              | 0.07            | 100                | 5                  |
| BZX55C8V2             | 7.7                                     | 8.7  | 5               | 7               | 50               | 1               | 0.03              | 0.08            | 100                | 6.2                |
| BZX55C9V1             | 8.5                                     | 9.6  | 5               | 10              | 50               | 1               | 0.03              | 0.09            | 100                | 6.8                |
| BZX55C10              | 9.4                                     | 10.6 | 5               | 15              | 70               | 1               | 0.03              | 0.11            | 100                | 7.5                |
| BZX55C11              | 10.4                                    | 11.6 | 5               | 20              | 70               | 1               | 0.03              | 0.11            | 100                | 8.2                |
| BZX55C12              | 11.4                                    | 12.7 | 5               | 20              | 90               | 1               | 0.03              | 0.11            | 100                | 9.1                |
| BZX55C13              | 12.4                                    | 14.1 | 5               | 26              | 110              | 1               | 0.03              | 0.11            | 100                | 10                 |
| BZX55C15              | 13.8                                    | 15.6 | 5               | 30              | 110              | 1               | 0.03              | 0.11            | 100                | 11                 |
| BZX55C16              | 15.3                                    | 17.1 | 5               | 40              | 170              | 1               | 0.03              | 0.11            | 100                | 12                 |
| BZX55C18              | 16.8                                    | 19.1 | 5               | 40              | 170              | 1               | 0.03              | 0.11            | 100                | 13                 |
| BZX55C20              | 18.8                                    | 21.2 | 5               | 55              | 220              | 1               | 0.03              | 0.11            | 100                | 15                 |
| BZX55C22              | 20.8                                    | 23.3 | 5               | 55              | 220              | 1               | 0.03              | 0.11            | 100                | 16                 |
| BZX55C24              | 22.8                                    | 25.6 | 5               | 80              | 220              | 1               | 0.04              | 0.12            | 100                | 18                 |
| BZX55C27              | 25.1                                    | 28.9 | 5               | 80              | 220              | 1               | 0.04              | 0.12            | 100                | 20                 |
| BZX55C30              | 28                                      | 32   | 5               | 80              | 220              | 1               | 0.04              | 0.12            | 100                | 22                 |
| BZX55C33              | 31                                      | 35   | 5               | 80              | 220              | 1               | 0.04              | 0.12            | 100                | 24                 |
| BZX55C36              | 34                                      | 38   | 5               | 80              | 220              | 0.5             | 0.04              | 0.12            | 100                | 27                 |
| BZX55C39              | 37                                      | 41   | 2.5             | 90              | 500              | 0.5             | 0.04              | 0.12            | 100                | 30                 |
| BZX55C43              | 40                                      | 46   | 2.5             | 90              | 600              | 0.5             | 0.04              | 0.12            | 100                | 33                 |
| BZX55C47              | 44                                      | 50   | 2.5             | 110             | 700              | 0.5             | 0.04              | 0.12            | 100                | 36                 |
| BZX55C51              | 48                                      | 54   | 2.5             | 125             | 700              | 0.5             | 0.04              | 0.12            | 100                | 39                 |
| BZX55C56              | 52                                      | 60   | 2.5             | 135             | 1000             | 0.5             | 0.04              | 0.12            | 100                | 43                 |
| BZX55C62              | 58                                      | 66   | 2.5             | 150             | 1000             | 0.5             | 0.04              | 0.12            | 100                | 47                 |
| BZX55C68              | 64                                      | 72   | 2.5             | 200             | 1000             | 0.5             | 0.04              | 0.12            | 100                | 51                 |
| BZX55C75              | 70                                      | 79   | 2.5             | 250             | 1500             | 0.5             | 0.04              | 0.12            | 100                | 56                 |
| BZX55C82              | 77                                      | 87   | 2.5             | 300             | 2000             | 0.5             | 0.04              | 0.12            | 100                | 62                 |
| BZX55C91              | 85                                      | 96   | 2.5             | 450             | 5000             | 0.1             | 0.04              | 0.12            | 100                | 68                 |
| BZX55C100             | 94                                      | 106  | 2.5             | 450             | 5000             | 0.1             | 0.04              | 0.12            | 100                | 75                 |

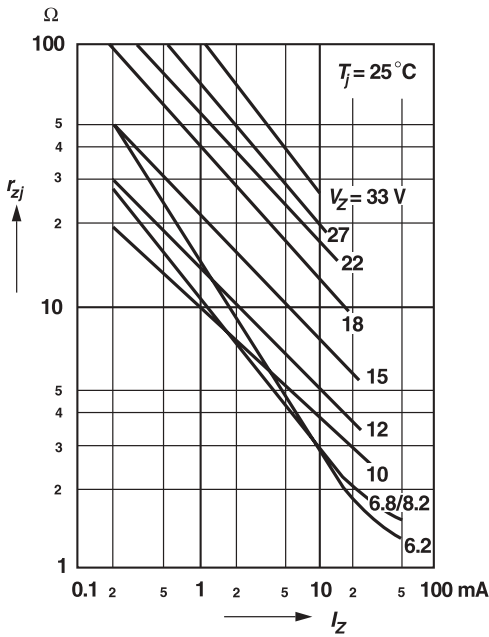
Note: (1) Measured with pulses  $t_p=5.0ms$ , BZX55B----- $\pm 2\%$  of  $V_{Znom}$ , BZX55C----- $\pm 5\%$  of  $V_{Znom}$

BZX55C2V0 thru BZX55C100

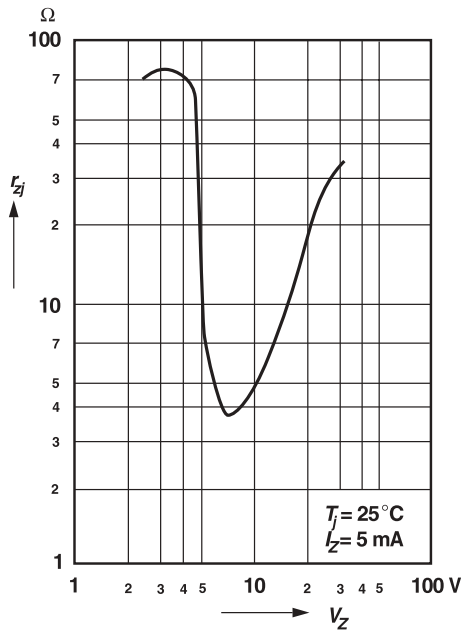


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Dynamic resistance  
versus Zener current



Dynamic resistance  
versus Zener voltage





TM

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**Ordering Information :**

|                |                              |
|----------------|------------------------------|
|                |                              |
| Part Number-TP | Tape&Reel: 10Kpcs/Reel       |
| Part Number-AP | Ammo Packing: 5Kpcs/Ammo Box |
| Part Number-BP | Bulk: 100Kpcs/Carton         |

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