

**M.C.C.**

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**BZX2C3V6  
THRU  
BZX2C200V**

## Features

- Wide Voltage Range Available
- Glass Package
- High Temp Soldering: 250°C for 10 Seconds At Terminals

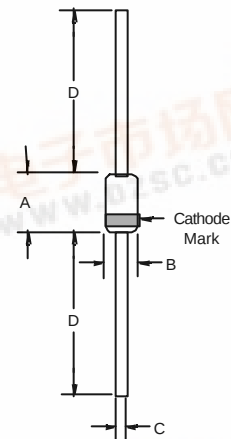
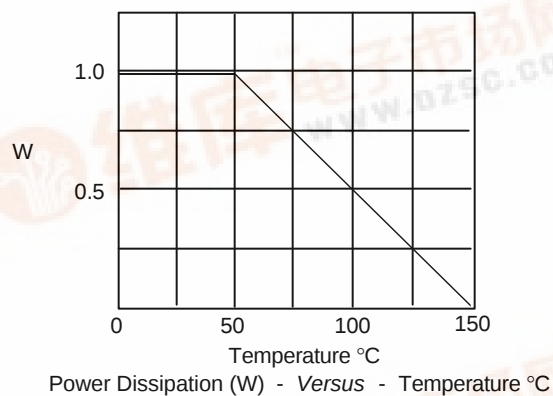
**2 Watt  
Zener Diode  
3.6 to 200 Volts**

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- 2 Watt DC Power Dissipation
- Maximum Forward Voltage @ 200mA: 1.2 Volts

**DO-41 GLASS**

Figure 1 - Derating Curve



| DIMENSIONS |        |      |       |      |      |
|------------|--------|------|-------|------|------|
| DIM        | INCHES |      | MM    |      | NOTE |
|            | MIN    | MAX  | MIN   | MAX  |      |
| A          | ---    | .205 | ---   | 5.21 |      |
| B          | ---    | .107 | ---   | 2.72 |      |
| C          | .030   | .034 | .762  | .864 |      |
| D          | 1.10   | ---  | 27.94 | ---  |      |



## BZX2C3V6 thru BZX2C200V

### ELECTRICAL CHARACTERISTICS @25°C

| MCC<br>PART NUMBER | NOMINAL<br>ZENER<br>VOLTAGE<br>$V_Z$<br>VOLTS | TEST<br>CURRENT<br>$I_{ZT}$<br>mA | MAXIMUM<br>DYNAMIC<br>IMPEDANCE<br>$Z_{ZT}$ @ $I_{ZT}$<br>OHM | MAXIMUM ZENER<br>IMPEDENCE |                | REVERSE LEAKAGE<br>CURRENT $I_R$ @ $V_R$ |                | MAXIMUM DC<br>ZENER<br>CURRENT<br>$I_S$<br>mA |
|--------------------|-----------------------------------------------|-----------------------------------|---------------------------------------------------------------|----------------------------|----------------|------------------------------------------|----------------|-----------------------------------------------|
|                    |                                               |                                   |                                                               | $Z_{ZK}$<br>OHM            | $I_{ZK}$<br>mA | $I_R$<br>uA                              | $V_R$<br>Volts |                                               |
| BZX2C3V6           | 3.6                                           | 139                               | 5                                                             | 400                        | 1.0            | 80                                       | 1              | 504                                           |
| BZX2C3V9           | 3.9                                           | 128                               | 5                                                             | 400                        | 1.0            | 30                                       | 1              | 468                                           |
| BZX2C4V3           | 4.3                                           | 116                               | 4.5                                                           | 400                        | 1.0            | 20                                       | 1              | 434                                           |
| BZX2C4V7           | 4.7                                           | 106                               | 4.5                                                           | 550                        | 1.0            | 5                                        | 1              | 386                                           |
| BZX2C5V1           | 5.1                                           | 98                                | 3.5                                                           | 600                        | 1.0            | 5                                        | 1              | 356                                           |
| BZX2C5V6           | 5.6                                           | 89.5                              | 2.5                                                           | 650                        | 1.0            | 5                                        | 2              | 324                                           |
| BZX2C6V2           | 6.2                                           | 80.5                              | 1.5                                                           | 700                        | 1.0            | 5                                        | 3              | 292                                           |
| BZX2C6V8           | 6.8                                           | 73.5                              | 2                                                             | 700                        | 1.0            | 5                                        | 4              | 266                                           |
| BZX2C7V5           | 7.5                                           | 66.5                              | 2                                                             | 700                        | 0.5            | 5                                        | 5              | 242                                           |
| BZX2C8V2           | 8.2                                           | 61                                | 2.3                                                           | 700                        | 0.5            | 5                                        | 6              | 220                                           |
| BZX2C9V1           | 9.1                                           | 55                                | 2.5                                                           | 700                        | 0.5            | 2                                        | 7              | 200                                           |
| BZX2C10V           | 10                                            | 50                                | 3.5                                                           | 700                        | 0.25           | 3                                        | 7.6            | 182                                           |
| BZX2C11V           | 11                                            | 45.5                              | 4                                                             | 700                        | 0.25           | 1                                        | 8.4            | 166                                           |
| BZX2C12V           | 12                                            | 41.5                              | 4.5                                                           | 700                        | 0.25           | 1                                        | 9.1            | 152                                           |
| BZX2C13V           | 13                                            | 38.5                              | 5                                                             | 700                        | 0.25           | 0.5                                      | 9.9            | 138                                           |
| BZX2C15V           | 15                                            | 33.4                              | 7                                                             | 700                        | 0.25           | 0.5                                      | 11.4           | 122                                           |
| BZX2C16V           | 16                                            | 31.2                              | 8                                                             | 700                        | 0.25           | 0.3                                      | 12.2           | 114                                           |
| BZX2C18V           | 18                                            | 27.8                              | 10                                                            | 750                        | 0.25           | 0.5                                      | 13.7           | 100                                           |
| BZX2C20V           | 20                                            | 25                                | 11                                                            | 750                        | 0.25           | 0.5                                      | 15.2           | 90                                            |
| BZX2C22V           | 22                                            | 22.8                              | 12                                                            | 750                        | 0.25           | 0.5                                      | 16.7           | 82                                            |
| BZX2C24V           | 24                                            | 20.8                              | 13                                                            | 750                        | 0.25           | 0.5                                      | 18.2           | 76                                            |
| BZX2C27V           | 27                                            | 18.5                              | 18                                                            | 750                        | 0.25           | 0.5                                      | 20.6           | 68                                            |
| BZX2C30V           | 30                                            | 16.6                              | 20                                                            | 1000                       | 0.25           | 0.5                                      | 22.5           | 60                                            |
| BZX2C33V           | 33                                            | 15.1                              | 23                                                            | 1000                       | 0.25           | 0.5                                      | 25.1           | 55                                            |
| BZX2C36V           | 36                                            | 13.9                              | 25                                                            | 100                        | 0.25           | 0.5                                      | 27.4           | 50                                            |
| BZX2C39V           | 39                                            | 12.8                              | 30                                                            | 1000                       | 0.25           | 0.5                                      | 29.7           | 47                                            |
| BZX2C43V           | 43                                            | 11.6                              | 35                                                            | 1500                       | 0.25           | 0.5                                      | 32.7           | 43                                            |
| BZX2C47V           | 47                                            | 10.6                              | 40                                                            | 1500                       | 0.25           | 0.5                                      | 35.8           | 39                                            |
| BZX2C51V           | 51                                            | 9.8                               | 48                                                            | 1500                       | 0.25           | 0.5                                      | 38.8           | 36                                            |
| BZX2C56V           | 56                                            | 9                                 | 55                                                            | 2000                       | 0.25           | 0.5                                      | 42.6           | 32                                            |
| BZX2C62V           | 62                                            | 8.1                               | 60                                                            | 2000                       | 0.25           | 0.5                                      | 47.1           | 29                                            |
| BZX2C68V           | 68                                            | 7.4                               | 75                                                            | 2000                       | 0.25           | 0.5                                      | 51.7           | 27                                            |
| BZX2C75V           | 75                                            | 6.7                               | 90                                                            | 2000                       | 0.25           | 0.5                                      | 56.0           | 24                                            |
| BZX2C82V           | 82                                            | 6.1                               | 100                                                           | 3000                       | 0.25           | 0.5                                      | 62.2           | 22                                            |
| BZX2C91V           | 91                                            | 5.5                               | 125                                                           | 3000                       | 0.25           | 0.5                                      | 69.2           | 20                                            |
| BZX2C100V          | 100                                           | 5                                 | 175                                                           | 3000                       | 0.25           | 0.5                                      | 76             | 18                                            |
| BZX2C110V          | 110                                           | 4.5                               | 250                                                           | 4000                       | 0.25           | 0.5                                      | 83.6           | 17                                            |
| BZX2C120V          | 120                                           | 4.2                               | 325                                                           | 4500                       | 0.25           | 0.5                                      | 91.2           | 15                                            |
| BZX2C130V          | 130                                           | 3.8                               | 400                                                           | 5000                       | 0.25           | 0.5                                      | 98.8           | 14                                            |
| BZX2C150V          | 150                                           | 3.3                               | 575                                                           | 6000                       | 0.25           | 0.5                                      | 114.0          | 12                                            |
| BZX2C160V          | 160                                           | 3.1                               | 650                                                           | 6500                       | 0.25           | 0.5                                      | 121.6          | 11                                            |
| BZX2C180V          | 180                                           | 2.8                               | 725                                                           | 7000                       | 0.25           | 0.5                                      | 136.8          | 10                                            |
| BZX2C200V          | 200                                           | 2.5                               | 900                                                           | 8000                       | 0.25           | 0.5                                      | 152            | 9                                             |