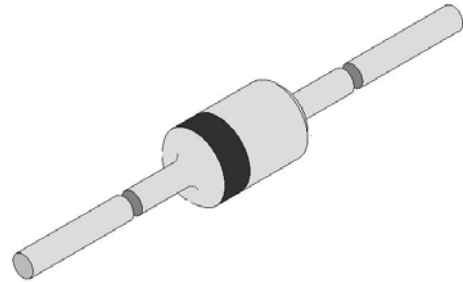


# Zener diode

## Features

1. High reliability
2. Wide voltage range available
3. Glass package
4. High temp soldering: 250°C for 10 seconds at terminals



## Applications

Voltage stabilization

## Absolute Maximum Ratings

$T_j=25^{\circ}\text{C}$

| Parameter                 | Test Conditions                             | Type | Symbol           | Value    | Unit               |
|---------------------------|---|------|------------------|----------|--------------------|
| Power dissipation         | $l=4\text{mm } T_L \leq 25^{\circ}\text{C}$ |      | $P_V$            | 2        | W                  |
| Junction temperature      |   |      | $T_j$            | 175      | $^{\circ}\text{C}$ |
| Storage temperature range |   |      | $T_{\text{stg}}$ | -65~+175 | $^{\circ}\text{C}$ |

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

## Electrical Characteristics

$T_j=25^{\circ}\text{C}$

| Parameter       | Test Conditions    | Type | Symbol | Min | Typ | Max | Unit |
|-----------------|--------------------|------|--------|-----|-----|-----|------|
| Forward voltage | $I_F=200\text{mA}$ |      | $V_F$  |     |     | 1.2 | V    |

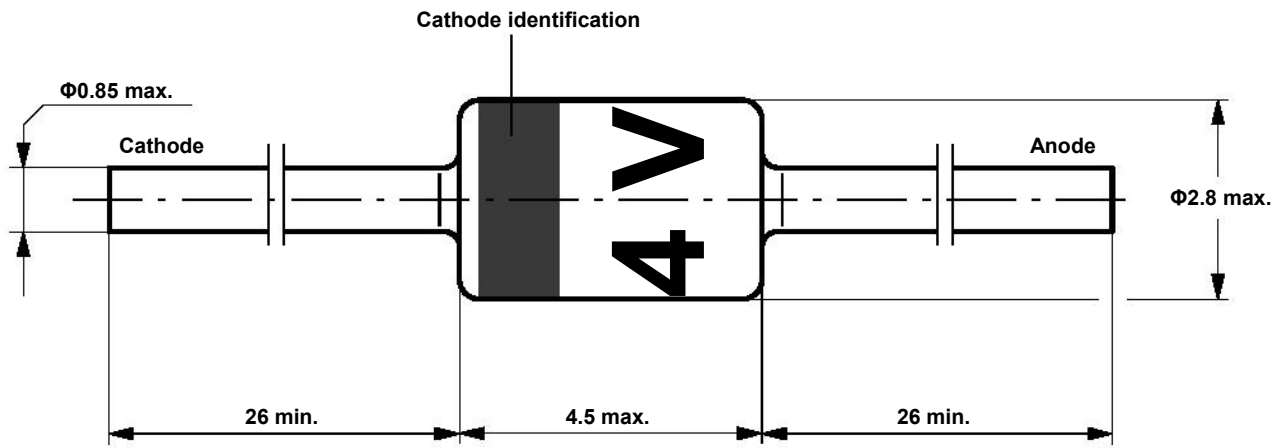
# BZX2C Series

$T_j=25^{\circ}\text{C}$

| Type  | $V_Z$ | $I_{ZT}$ | $Z_{ZT}$ | $Z_{ZK}$ | $I_{ZK}$ | $I_R$         | $V_R$ | $I_S$ |
|-------|-------|----------|----------|----------|----------|---------------|-------|-------|
| BZX2C | V     | mA       | $\Omega$ | $\Omega$ | mA       | $\mu\text{A}$ | V     | mA    |
| 3V6   | 3.6   | 139      | 5        | 400      | 1.0      | 80            | 1     | 504   |
| 3V9   | 3.9   | 126      | 5        | 400      | 1.0      | 30            | 1     | 468   |
| 4V3   | 4.3   | 116      | 4.5      | 400      | 1.0      | 20            | 1     | 434   |
| 4V7   | 4.7   | 106      | 4.5      | 550      | 1.0      | 5             | 1     | 386   |
| 5V1   | 5.1   | 98       | 3.5      | 600      | 1.0      | 5             | 1     | 356   |
| 5V6   | 5.6   | 89.5     | 2.5      | 650      | 1.0      | 5             | 2     | 324   |
| 6V2   | 6.2   | 80.5     | 1.5      | 700      | 1.0      | 5             | 3     | 292   |
| 6V8   | 6.8   | 73.5     | 2        | 700      | 1.0      | 5             | 4     | 266   |
| 7V5   | 7.5   | 66.5     | 2        | 700      | 0.5      | 5             | 5     | 242   |
| 8V2   | 8.2   | 61       | 2.3      | 700      | 0.5      | 5             | 6     | 220   |
| 9V1   | 9.1   | 55       | 2.5      | 700      | 0.5      | 2             | 7     | 200   |
| 10    | 10    | 50       | 3.5      | 700      | 0.25     | 3             | 7.6   | 182   |
| 11    | 11    | 45.5     | 4        | 700      | 0.25     | 1             | 8.4   | 166   |
| 12    | 12    | 41.5     | 4.5      | 700      | 0.25     | 1             | 9.1   | 152   |
| 13    | 13    | 38.5     | 5        | 700      | 0.25     | 0.5           | 9.9   | 138   |
| 15    | 15    | 33.4     | 7        | 700      | 0.25     | 0.5           | 11.4  | 122   |
| 16    | 16    | 31.2     | 8        | 700      | 0.25     | 0.3           | 12.2  | 114   |
| 18    | 18    | 27.8     | 10       | 750      | 0.25     | 0.5           | 13.7  | 100   |
| 20    | 20    | 25       | 11       | 750      | 0.25     | 0.5           | 15.2  | 90    |
| 22    | 22    | 22.8     | 12       | 750      | 0.25     | 0.5           | 16.7  | 82    |
| 24    | 24    | 20.8     | 13       | 750      | 0.25     | 0.5           | 18.2  | 76    |
| 27    | 27    | 18.5     | 18       | 750      | 0.25     | 0.5           | 20.6  | 68    |
| 30    | 30    | 16.6     | 20       | 1000     | 0.25     | 0.5           | 22.5  | 60    |
| 33    | 33    | 15.1     | 23       | 1000     | 0.25     | 0.5           | 25.1  | 55    |
| 36    | 36    | 13.9     | 25       | 100      | 0.25     | 0.5           | 27.4  | 50    |
| 39    | 39    | 12.8     | 30       | 1000     | 0.25     | 0.5           | 29.7  | 47    |
| 43    | 43    | 11.6     | 35       | 1500     | 0.25     | 0.5           | 32.7  | 43    |
| 47    | 47    | 10.6     | 40       | 1500     | 0.25     | 0.5           | 35.8  | 39    |
| 51    | 51    | 9.8      | 48       | 1500     | 0.25     | 0.5           | 36.6  | 36    |
| 56    | 56    | 9        | 55       | 2000     | 0.25     | 0.5           | 42.6  | 32    |
| 62    | 62    | 8.1      | 60       | 2000     | 0.25     | 0.5           | 47.1  | 29    |
| 68    | 68    | 7.4      | 75       | 2000     | 0.25     | 0.5           | 51.7  | 27    |
| 75    | 75    | 6.7      | 90       | 2000     | 0.25     | 0.5           | 56.0  | 24    |

1. Tested with pulses  $t_p=20\text{ ms}$
2. Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

**Dimensions in mm**



Standard Glass Case  
JEDEC DO-41

**Marking**

