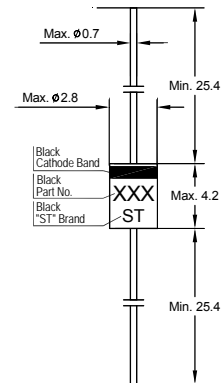


ZENER DIODE

For use in stabilizing and clipping circuits with high power rating. The Zener voltages are graded according to the international E24 standard. Smaller voltage tolerances and higher Zener voltages are upon request.



Glass Case DO-41
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|---------------------------|-----------|-----------------|------------------|
| Power Dissipation | P_{tot} | 1 ¹⁾ | W |
| Junction Temperature | T_j | 200 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 65 to + 200 | $^\circ\text{C}$ |

¹⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter | Symbol | Max. | Unit |
|---|-----------|-------------------|------|
| Thermal Resistance Junction to Ambient Air | R_{thA} | 170 ¹⁾ | K/W |
| Forward Voltage at $I_F = 200\text{ mA}$ | V_F | 1.2 | V |

¹⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.

ZENER DIODE

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Type | Zener Voltage Range ¹⁾ | | | Dynamic Resistance | | | | Reverse Current | |
|-----------|-----------------------------------|-------------|-------------|--------------------|-------------|-------------------|-------------|------------------------|----------|
| | V_{Znom} | V_{ZT} | at I_{ZT} | Z_{ZT} | at I_{ZT} | Z_{ZT} | at I_{ZK} | I_R | at V_R |
| | (V) | (V) | (mA) | Max. (Ω) | (mA) | Max. (Ω) | (mA) | Max. (μA) | (V) |
| BZV85C3V0 | 3 | 2.8...3.2 | 80 | 20 | 80 | 400 | 1 | 100 | 1 |
| BZV85C3V3 | 3.3 | 3.1...3.5 | 70 | 20 | 70 | 400 | 1 | 40 | 1 |
| BZV85C3V6 | 3.6 | 3.4...3.8 | 60 | 15 | 60 | 500 | 1 | 20 | 1 |
| BZV85C3V9 | 3.9 | 3.7...4.1 | 60 | 15 | 60 | 500 | 1 | 10 | 1 |
| BZV85C4V3 | 4.3 | 4...4.6 | 50 | 13 | 50 | 500 | 1 | 3 | 1 |
| BZV85C4V7 | 4.7 | 4.4...5 | 45 | 13 | 45 | 600 | 1 | 3 | 1 |
| BZV85C5V1 | 5.1 | 4.8...5.4 | 45 | 10 | 45 | 500 | 1 | 1 | 1.5 |
| BZV85C5V6 | 5.6 | 5.2...6 | 45 | 7 | 45 | 400 | 1 | 1 | 2 |
| BZV85C6V2 | 6.2 | 5.8...6.6 | 35 | 4 | 35 | 300 | 1 | 1 | 3 |
| BZV85C6V8 | 6.8 | 6.4...7.2 | 35 | 3.5 | 35 | 300 | 1 | 1 | 4 |
| BZV85C7V5 | 7.5 | 7...7.9 | 35 | 3 | 35 | 200 | 0.5 | 1 | 4.5 |
| BZV85C8V2 | 8.2 | 7.7...8.7 | 25 | 5 | 25 | 200 | 0.5 | 1 | 6.2 |
| BZV85C9V1 | 9.1 | 8.5...9.6 | 25 | 5 | 25 | 200 | 0.5 | 1 | 6.8 |
| BZV85C10 | 10 | 9.4...10.6 | 25 | 7 | 25 | 200 | 0.5 | 0.5 | 7 |
| BZV85C11 | 11 | 10.4...11.6 | 20 | 8 | 20 | 300 | 0.5 | 0.5 | 8.2 |
| BZV85C12 | 12 | 11.4...12.7 | 20 | 9 | 20 | 350 | 0.5 | 0.5 | 9.1 |
| BZV85C13 | 13 | 12.4...14.1 | 20 | 10 | 20 | 400 | 0.5 | 0.5 | 10 |
| BZV85C15 | 15 | 13.8...15.6 | 15 | 15 | 15 | 500 | 0.5 | 0.5 | 11 |
| BZV85C16 | 16 | 15.3...17.1 | 15 | 15 | 15 | 500 | 0.5 | 0.5 | 12 |
| BZV85C18 | 18 | 16.8...19.1 | 15 | 20 | 15 | 500 | 0.5 | 0.5 | 13 |
| BZV85C20 | 20 | 18.8...21.2 | 10 | 24 | 10 | 600 | 0.5 | 0.5 | 15 |
| BZV85C22 | 22 | 20.8...23.3 | 10 | 25 | 10 | 600 | 0.5 | 0.5 | 16 |
| BZV85C24 | 24 | 22.8...25.6 | 10 | 25 | 10 | 600 | 0.5 | 0.5 | 18 |
| BZV85C27 | 27 | 25.1...28.9 | 8 | 30 | 8 | 750 | 0.25 | 0.5 | 20 |
| BZV85C30 | 30 | 28...32 | 8 | 30 | 8 | 1000 | 0.25 | 0.5 | 22 |
| BZV85C33 | 33 | 31...35 | 8 | 35 | 8 | 1000 | 0.25 | 0.5 | 24 |
| BZV85C36 | 36 | 34...38 | 8 | 40 | 8 | 1000 | 0.25 | 0.5 | 27 |
| BZV85C39 | 39 | 37...41 | 6 | 50 | 6 | 1000 | 0.25 | 0.5 | 30 |
| BZV85C43 | 43 | 40...46 | 6 | 50 | 6 | 1000 | 0.25 | 0.5 | 33 |
| BZV85C47 | 47 | 44...50 | 4 | 90 | 4 | 1500 | 0.25 | 0.5 | 36 |
| BZV85C51 | 51 | 48...54 | 4 | 115 | 4 | 1500 | 0.25 | 0.5 | 39 |
| BZV85C56 | 56 | 52...60 | 4 | 120 | 4 | 2000 | 0.25 | 0.5 | 43 |
| BZV85C62 | 62 | 58...66 | 4 | 125 | 4 | 2000 | 0.25 | 0.5 | 47 |
| BZV85C68 | 68 | 64...72 | 4 | 130 | 4 | 2000 | 0.25 | 0.5 | 51 |
| BZV85C75 | 75 | 70...79 | 4 | 135 | 4 | 2000 | 0.25 | 0.5 | 56 |

¹⁾ Tested with pulses $t_p = 20\text{ ms}$.

ZENER DIODE

