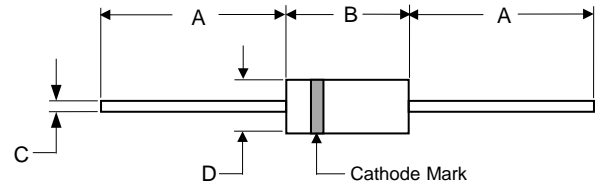


Features

* For use in stabilizing and clipping circuits with high power rating.



RoHS
COMPLIANT



| DO-41G | | | | |
|--------|--------|-------|-------|------|
| DIM | INCHES | | MM | |
| | MIN | MAX | MIN | MAX |
| A | 1.000 | --- | 25.40 | --- |
| B | --- | 0.165 | --- | 4.20 |
| C | --- | 0.028 | --- | 0.70 |
| D | --- | 0.110 | --- | 2.80 |

Maximum Ratings (T_A=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---------------------------|------------------|-----------------|------|
| Power Dissipation | P _{tot} | 1 ¹⁾ | W |
| Junction Temperature | T _j | 200 | °C |
| Storage Temperature Range | T _{stg} | - 65 to + 200 | °C |

Note:

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

Characteristics (T_A=25°C unless otherwise noted)

| Parameter | Symbol | Max. | Unit |
|---|------------------|-------------------|------|
| Thermal Resistance Junction to Ambient Air | R _{thA} | 170 ¹⁾ | K/W |
| Forward Voltage at I _F = 200 mA | V _F | 1.2 | V |

Note:

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

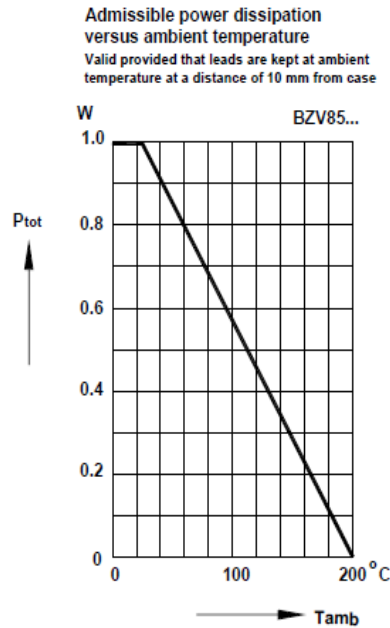
Electrical Characteristics (T_A=25°C unless otherwise noted)

| Type | Zener Voltage Range ¹⁾ | | | Dynamic Resistance | | | | Reverse Current | |
|-----------|-----------------------------------|-----------------|--------------------|--------------------|--------------------|-----------------|--------------------|-----------------|-------------------|
| | V _{Znom} | V _{ZT} | at I _{ZT} | Z _{TT} | at I _{ZT} | Z _{ZK} | 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 |

Note:

1) Tested with pulses t_p = 20 ms.

Ratings and Characteristic Curves



Ordering Information

| Part No. | Package | Packing Code | Packing |
|---------------|---------|--------------|--------------|
| BZV85C Series | DO-41G | A25 | 2500pcs/Ammo |

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