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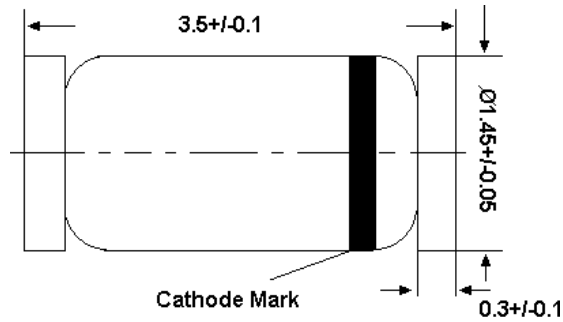
PLED

BZV55C2V0-MS THRU BZV55C75-MS

Product specification

Silicon Epitaxial Planar Zener Diodes

in MiniMELF case especially for automatic insertion. The Zener voltages are graded according to the international E24 standard. Smaller voltage tolerances and higher Zener voltages are upon request.



Glass case MiniMELF
Dimensions in mm

REEL SPECIFICATION

| P/N | PKG | QTY |
|-------------------------------|------|------|
| BZV55C2V0-MS THRU BZV55C75-MS | LL34 | 2500 |

Absolute Maximum Ratings (Ta = 25°C)

| Parameter | Symbol | Value | Unit |
|--|------------------|-------------------|------|
| Power Dissipation | P _{tot} | 500 ¹⁾ | mW |
| Junction Temperature | T _j | 175 | °C |
| Storage Temperature Range | T _{stg} | - 55 to + 175 | °C |
| ¹⁾ Valid provided that electrodes are kept at ambient temperature | | | |

Characteristics at Ta = 25°C

| | | | |
|--|------------------|-------------------|------|
| Thermal Resistance Junction to Ambient Air | R _{thA} | 0.3 ¹⁾ | K/mW |
| Forward Voltage at I _F = 100 mA | V _F | 1 | V |
| ¹⁾ Valid provided that electrodes are kept at ambient temperature | | | |

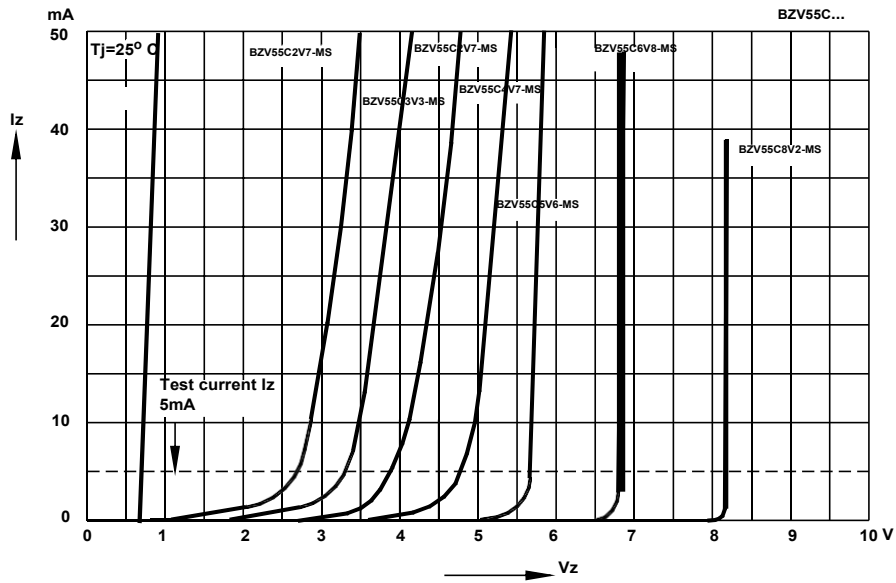
Characteristics at Ta = 25°C

| P/N | Zener Voltage Range ¹⁾ | | | Dynamic Resistance | | | Reverse Leakage Current | | | Temp. Coefficient of Zener Voltage |
|--------------|-----------------------------------|-----------------|--------------------|--------------------|-----------------|--------------------|-------------------------|------------------------|-------------------|------------------------------------|
| | V _{Zno} _m | V _{ZT} | at I _{ZT} | Z _{ZT} | Z _{ZK} | at I _{ZK} | T _a = 25°C | T _a = 125°C | at V _R | |
| | (V) | (V) | (mA) | Max. (Ω) | Max. (Ω) | (mA) | Max. (μA) | Max. (μA) | (V) | TKvz (%/K) |
| BZV55C2V0-MS | 2.0 | 1.8...2.15 | 5 | 85 | 600 | 1 | 100 | 200 | 1 | -0.09...-0.06 |
| BZV55C2V2-MS | 2.2 | 2.08...2.33 | 5 | 85 | 600 | 1 | 75 | 160 | 1 | -0.09...-0.06 |
| BZV55C2V4-MS | 2.4 | 2.28...2.56 | 5 | 85 | 600 | 1 | 50 | 100 | 1 | -0.09...-0.06 |
| BZV55C2V7-MS | 2.7 | 2.5...2.9 | 5 | 85 | 600 | 1 | 10 | 50 | 1 | -0.09...-0.06 |
| BZV55C3V0-MS | 3.0 | 2.8...3.2 | 5 | 85 | 600 | 1 | 4 | 40 | 1 | -0.08...-0.05 |
| BZV55C3V3-MS | 3.3 | 3.1...3.5 | 5 | 85 | 600 | 1 | 2 | 40 | 1 | -0.08...-0.05 |
| BZV55C3V6-MS | 3.6 | 3.4...3.8 | 5 | 85 | 600 | 1 | 2 | 40 | 1 | -0.08...-0.05 |
| BZV55C3V9-MS | 3.9 | 3.7...4.1 | 5 | 85 | 600 | 1 | 2 | 40 | 1 | -0.08...-0.05 |
| BZV55C4V3-MS | 4.3 | 4...4.6 | 5 | 75 | 600 | 1 | 1 | 20 | 1 | -0.06...-0.03 |
| BZV55C4V7-MS | 4.7 | 4.4...5 | 5 | 60 | 600 | 1 | 0.5 | 10 | 1 | -0.05...+0.02 |
| BZV55C5V1-MS | 5.1 | 4.8...5.4 | 5 | 35 | 550 | 1 | 0.1 | 2 | 1 | -0.02...+0.02 |
| BZV55C5V6-MS | 5.6 | 5.2...6 | 5 | 25 | 450 | 1 | 0.1 | 2 | 1 | -0.05...+0.05 |
| BZV55C6V2-MS | 6.2 | 5.8...6.6 | 5 | 10 | 200 | 1 | 0.1 | 2 | 2 | 0.03...0.06 |
| BZV55C6V8-MS | 6.8 | 6.4...7.2 | 5 | 8 | 150 | 1 | 0.1 | 2 | 3 | 0.03...0.07 |
| BZV55C7V5-MS | 7.5 | 7...7.9 | 5 | 7 | 50 | 1 | 0.1 | 2 | 5 | 0.03...0.07 |
| BZV55C8V2-MS | 8.2 | 7.7...8.7 | 5 | 7 | 50 | 1 | 0.1 | 2 | 6.2 | 0.03...0.08 |
| BZV55C9V1-MS | 9.1 | 8.5...9.6 | 5 | 10 | 50 | 1 | 0.1 | 2 | 6.8 | 0.03...0.09 |
| BZV55C10-MS | 10 | 9.4...10.6 | 5 | 15 | 70 | 1 | 0.1 | 2 | 7.5 | 0.03...0.1 |
| BZV55C11-MS | 11 | 10.4...11.6 | 5 | 20 | 70 | 1 | 0.1 | 2 | 8.2 | 0.03...0.11 |
| BZV55C12-MS | 12 | 11.4...12.7 | 5 | 20 | 90 | 1 | 0.1 | 2 | 9.1 | 0.03...0.11 |
| BZV55C13-MS | 13 | 12.4...14.1 | 5 | 26 | 110 | 1 | 0.1 | 2 | 10 | 0.03...0.11 |
| BZV55C15-MS | 15 | 13.8...15.6 | 5 | 30 | 110 | 1 | 0.1 | 2 | 11 | 0.03...0.11 |
| BZV55C16-MS | 16 | 15.3...17.1 | 5 | 40 | 170 | 1 | 0.1 | 2 | 12 | 0.03...0.11 |
| BZV55C18-MS | 18 | 16.8...19.1 | 5 | 50 | 170 | 1 | 0.1 | 2 | 13 | 0.03...0.11 |
| BZV55C20-MS | 20 | 18.8...21.2 | 5 | 55 | 220 | 1 | 0.1 | 2 | 15 | 0.03...0.11 |
| BZV55C22-MS | 22 | 20.8...23.3 | 5 | 55 | 220 | 1 | 0.1 | 2 | 16 | 0.04...0.12 |
| BZV55C24-MS | 24 | 22.8...25.6 | 5 | 80 | 220 | 1 | 0.1 | 2 | 18 | 0.04...0.12 |
| BZV55C27-MS | 27 | 25.1...28.9 | 5 | 80 | 220 | 1 | 0.1 | 2 | 20 | 0.04...0.12 |
| BZV55C30-MS | 30 | 28...32 | 5 | 80 | 220 | 1 | 0.1 | 2 | 22 | 0.04...0.12 |
| BZV55C33-MS | 33 | 31...35 | 5 | 80 | 220 | 1 | 0.1 | 2 | 24 | 0.04...0.12 |
| BZV55C36-MS | 36 | 34...38 | 5 | 80 | 220 | 1 | 0.1 | 2 | 27 | 0.04...0.12 |
| BZV55C39-MS | 39 | 37...41 | 2.5 | 90 | 500 | 0.5 | 0.1 | 5 | 30 | 0.04...0.12 |
| BZV55C43-MS | 43 | 40...46 | 2.5 | 90 | 500 | 0.5 | 0.1 | 5 | 33 | 0.04...0.12 |
| BZV55C47-MS | 47 | 44...50 | 2.5 | 110 | 600 | 0.5 | 0.1 | 5 | 36 | 0.04...0.12 |
| BZV55C51-MS | 51 | 48...54 | 2.5 | 125 | 700 | 0.5 | 0.1 | 10 | 39 | 0.04...0.12 |
| BZV55C56-MS | 56 | 52...60 | 2.5 | 135 | 700 | 0.5 | 0.1 | 10 | 43 | 0.04...0.12 |
| BZV55C62-MS | 62 | 58...66 | 2.5 | 150 | 1000 | 0.5 | 0.1 | 10 | 47 | 0.04...0.12 |
| BZV55C68-MS | 68 | 64...72 | 2.5 | 200 | 1000 | 0.5 | 0.1 | 10 | 51 | 0.04...0.12 |
| BZV55C75-MS | 75 | 70...79 | 2.5 | 250 | 1000 | 0.5 | 0.1 | 10 | 56 | 0.04...0.12 |

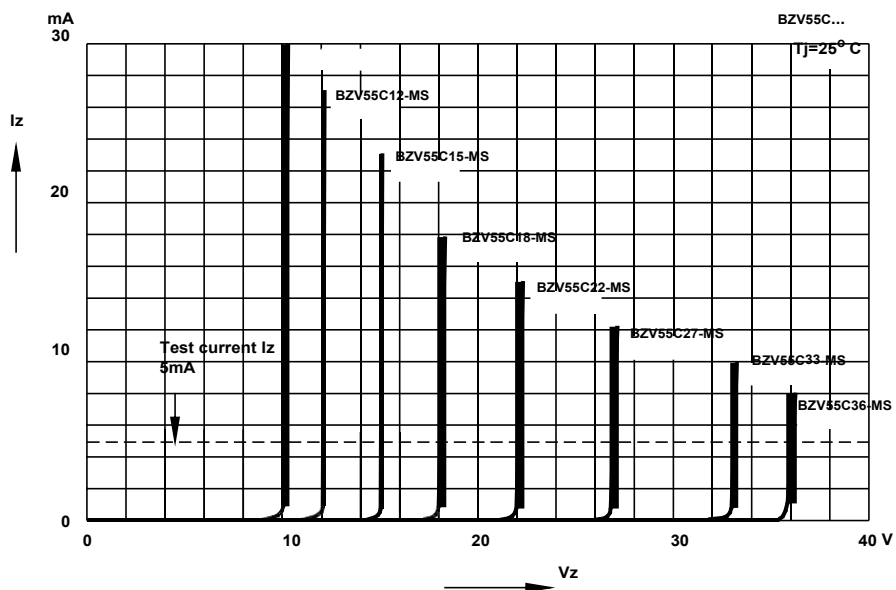
1) Tested with pulses t_p = 20 ms.

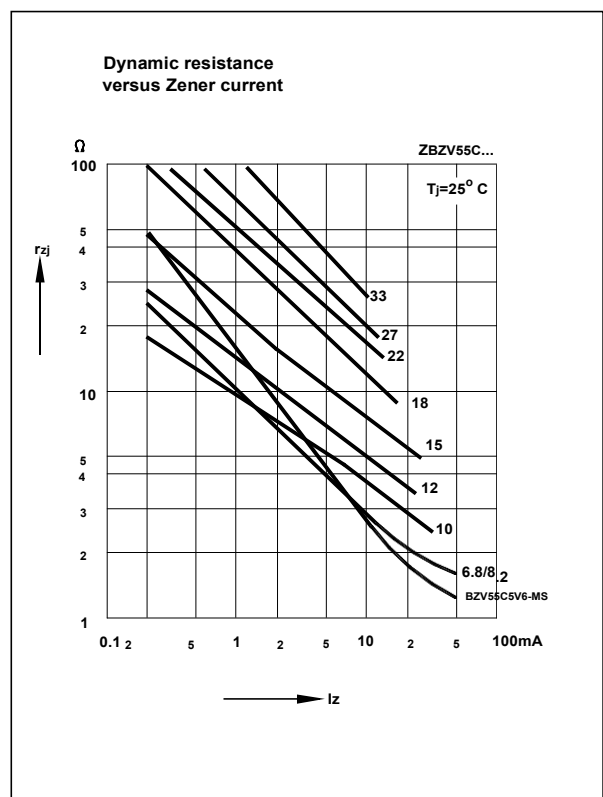
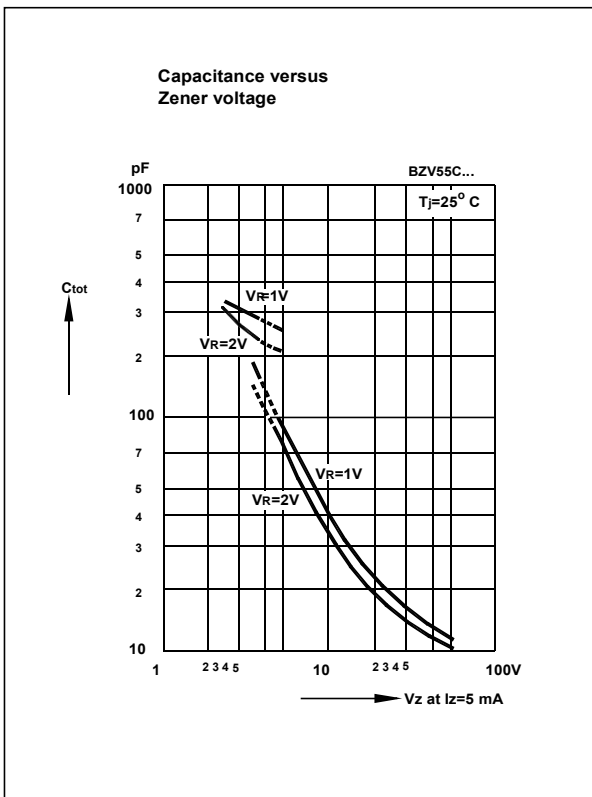
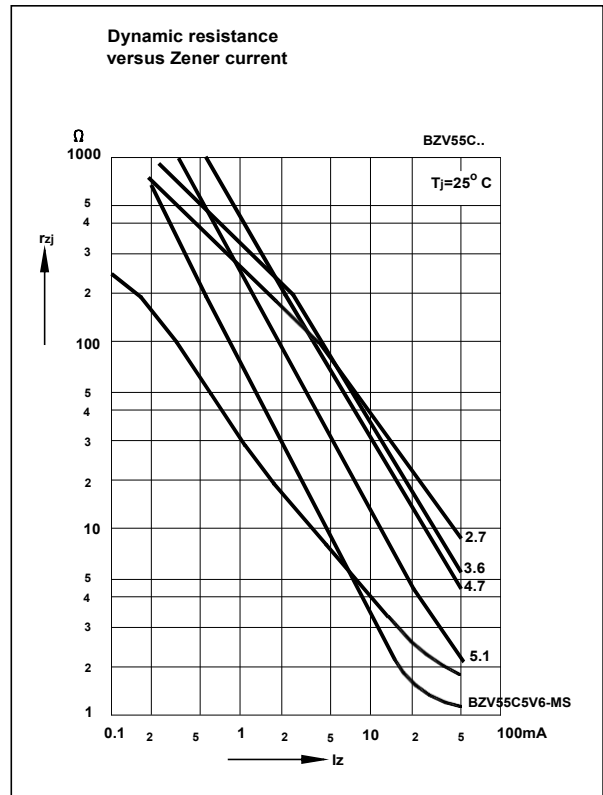
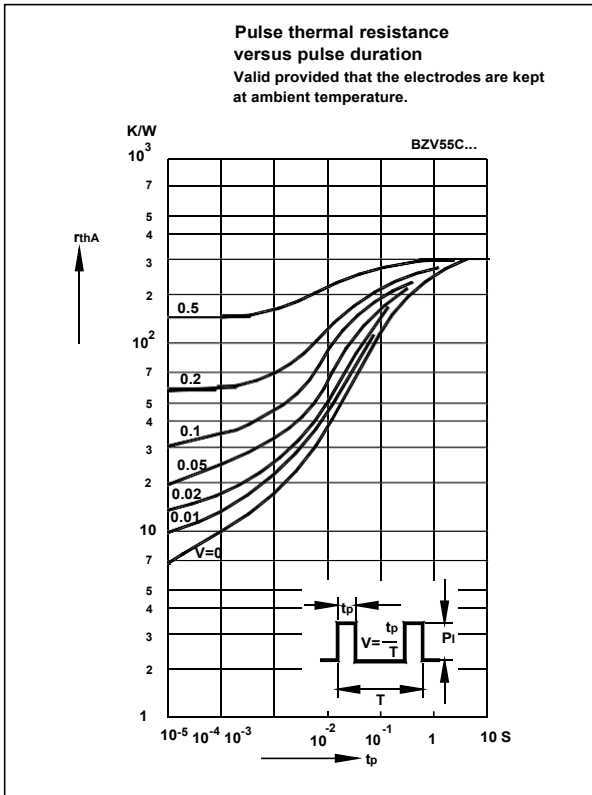
2) The BZV55C is a silicon diode with operation in forward direction. Hence, the index of all parameters should be "F" instead of "Z". Connect the cathode electrode to the negative pole.

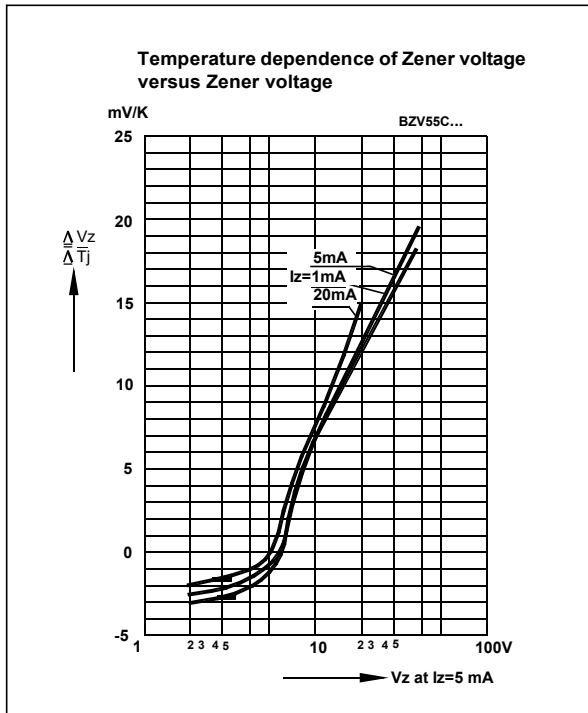
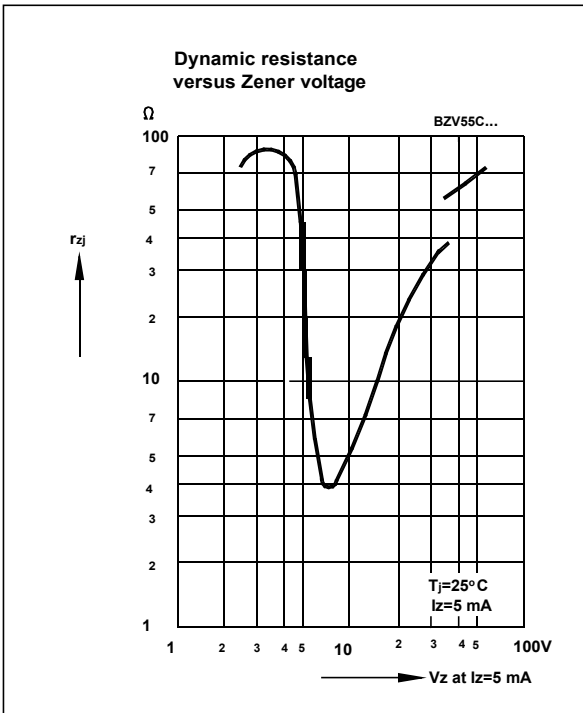
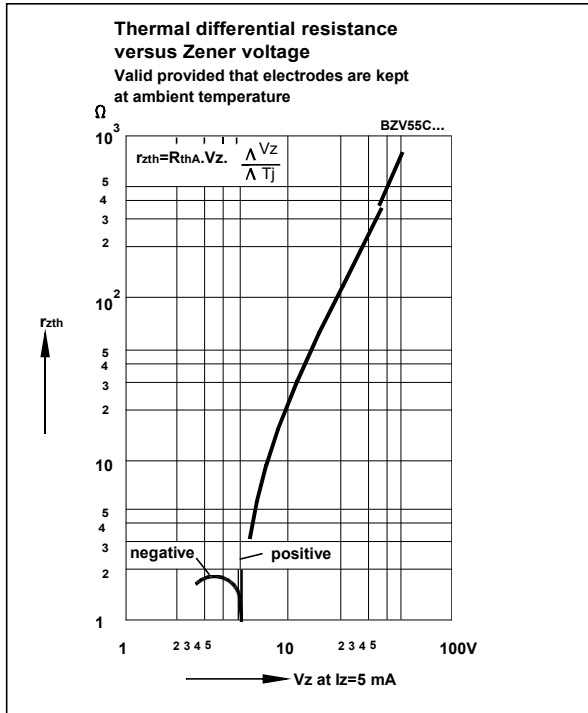
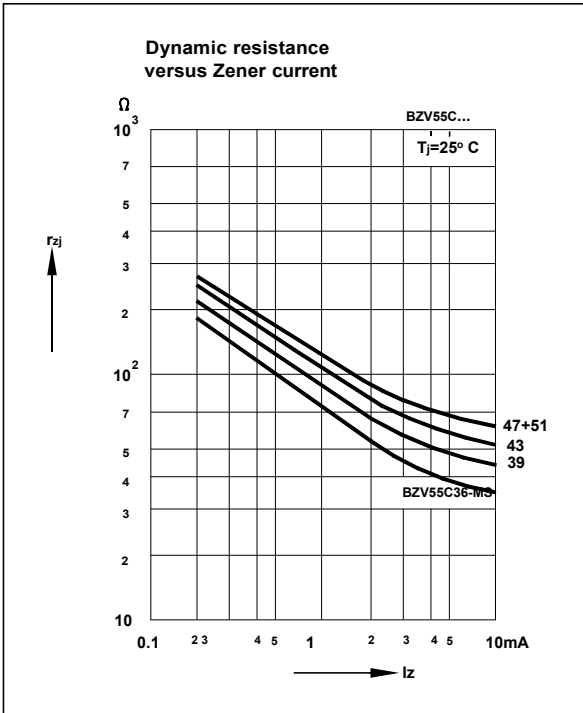
Breakdown characteristics
T_j = constant (pulsed)

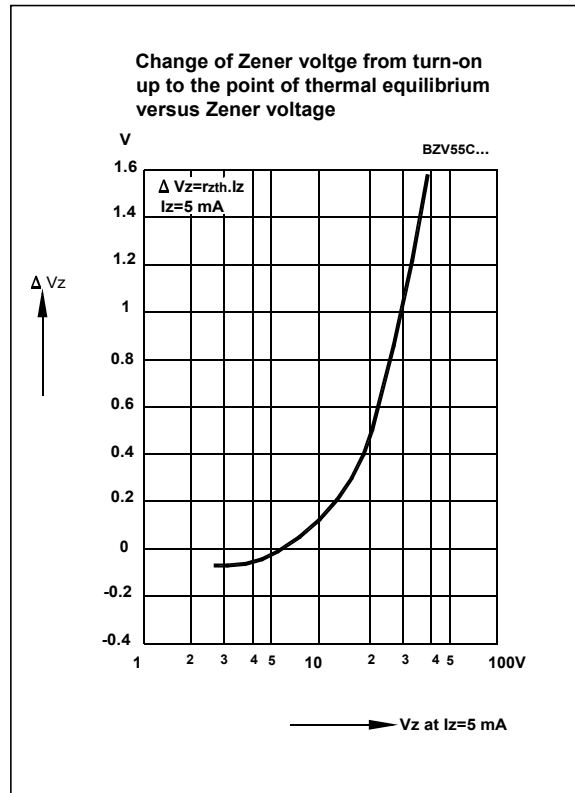
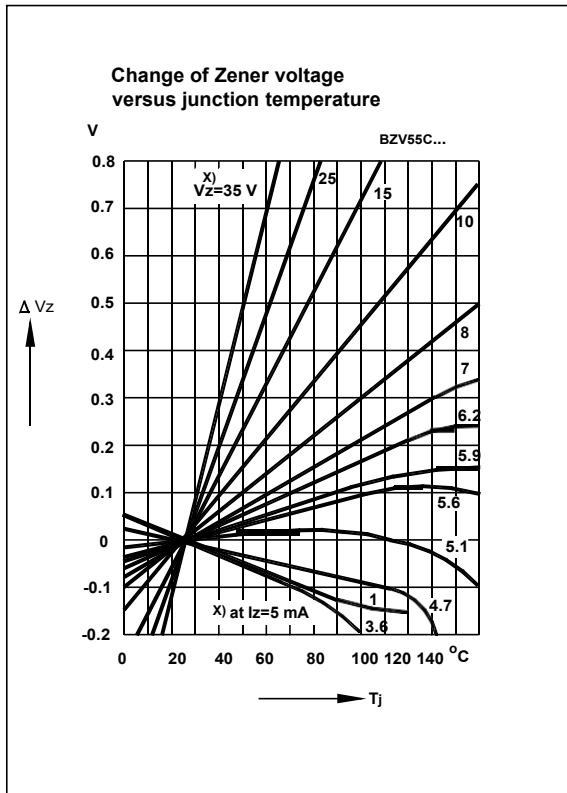
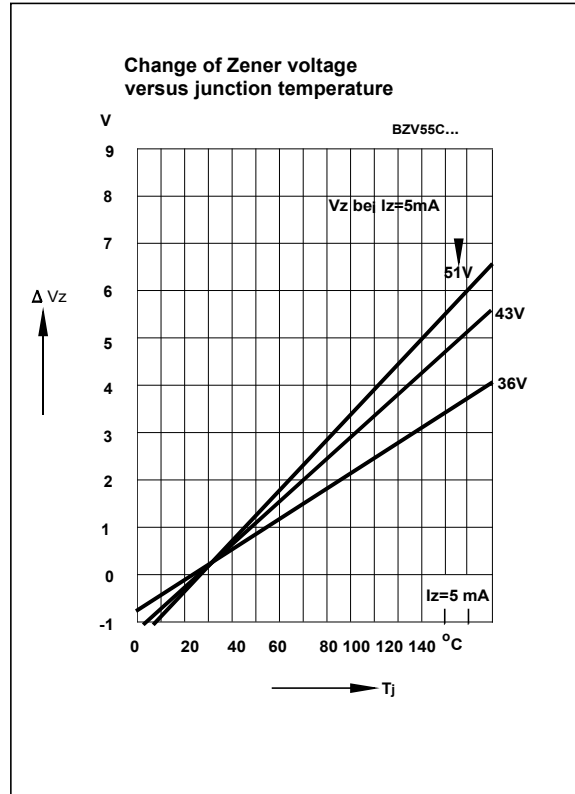
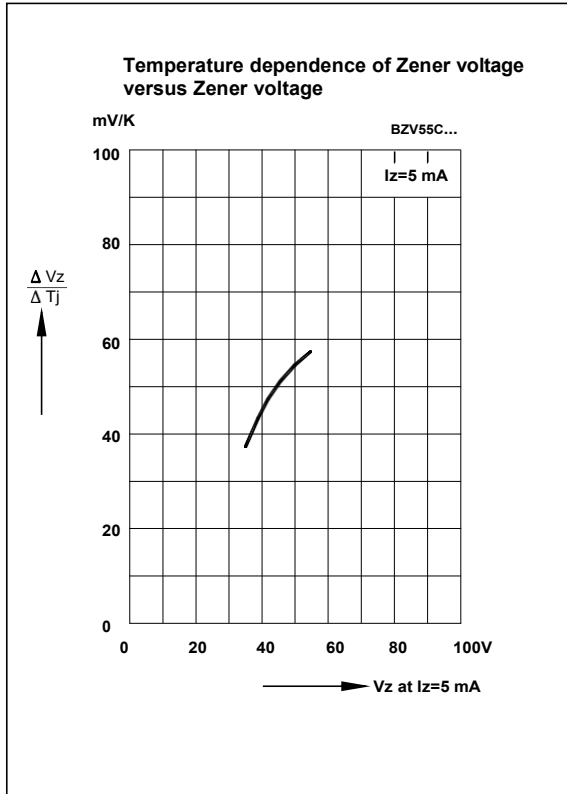


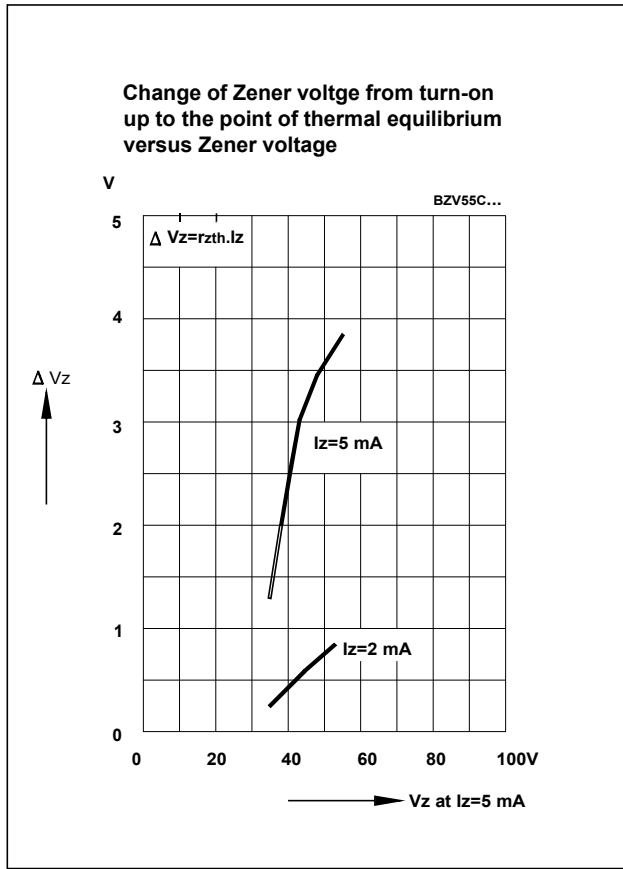
Breakdown characteristics
T_j = constant (pulsed)











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