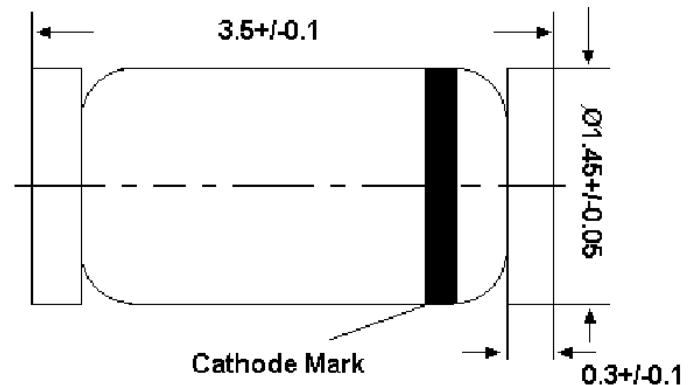


FEATURES

- Total power dissipation: max. 500 mW
- Two tolerance series: $\pm 2\%$ and approx. $\pm 5\%$
- Standard tolerance: approx. $\pm 5\%$ (refer to below "zener voltage range") ; $\pm 2\%$ tolerance available on request.

LL-34



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| PARAMETER | SYMBOL | VALUE | UNIT |
|--|----------------|-------------------|------------------|
| Power Dissipation | P_{tot} | 500 ¹⁾ | mW |
| Junction and Storage Temperature Range | T_j, T_{stg} | -65 to +200 | $^\circ\text{C}$ |

1) Valid provided that electrodes are kept at ambient temperature.

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

| PARAMETER | SYMBOL | MAX | UNIT |
|--|-----------|-------------------|------|
| Thermal Resistance Junction to Ambient Air | R_{thA} | 0.3 ¹⁾ | K/mW |
| Forward Voltage at $I_F = 100 \text{ mA}$ | V_F | 0.9 | V |

1) Valid provided that electrodes are kept at ambient temperature.

Kingtronics®**BZV55C-SERIES**
SILICON PLANAR ZENER
DIODES**Characteristics at $T_j=25^\circ\text{C}$**

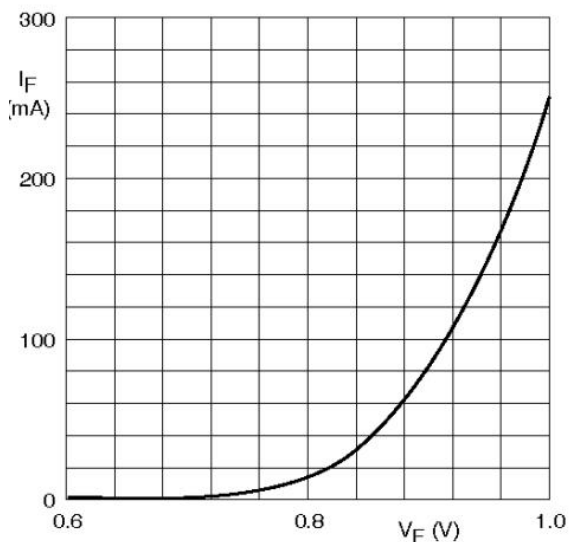
| BZV55C... | Zener Voltage Range ¹⁾ | | Dynamic Resistance | | | Reverse Current | |
|-----------|-----------------------------------|-------------------------|--|-----------------------------|----------------------------|-----------------------------|--------------------------|
| | V _{ZT} (V) | I _{ZT} (mA) | Z _{ZT} at I _{ZT} Max. (Ω) | Z _{Zk} Max. (Ω) | at I _{ZK} (mA) | I _R Max. (μA) | at V _R (V) |
| 2V4 | 2.2...2.6 | 5 | 100 | 600 | 1 | 50 | 1 |
| 2V7 | 2.5...2.9 | 5 | 100 | 600 | 1 | 20 | 1 |
| 3V0 | 2.8...3.2 | 5 | 95 | 600 | 1 | 10 | 1 |
| 3V3 | 3.1...3.5 | 5 | 95 | 600 | 1 | 5 | 1 |
| 3V6 | 3.4...3.8 | 5 | 90 | 600 | 1 | 5 | 1 |
| 3V9 | 3.7...4.1 | 5 | 90 | 600 | 1 | 3 | 1 |
| 4V3 | 4...4.6 | 5 | 90 | 600 | 1 | 3 | 1 |
| 4V7 | 4.4...5 | 5 | 80 | 500 | 1 | 3 | 2 |
| 5V1 | 4.8...5.5 | 5 | 60 | 480 | 1 | 2 | 2 |
| 5V6 | 5.2...6 | 5 | 40 | 400 | 1 | 1 | 2 |
| 6V2 | 5.8...6.6 | 5 | 10 | 150 | 1 | 3 | 4 |
| 6V8 | 6.4...7.2 | 5 | 15 | 80 | 1 | 2 | 4 |
| 7V5 | 7...7.9 | 5 | 15 | 80 | 1 | 1 | 5 |
| 8V2 | 7.7...8.7 | 5 | 15 | 80 | 1 | 0.7 | 5 |
| 9V1 | 8.5...9.6 | 5 | 15 | 100 | 1 | 0.5 | 6 |
| 10 | 9.4...10.6 | 5 | 20 | 150 | 1 | 0.2 | 7 |
| 11 | 10.4...11.6 | 5 | 20 | 150 | 1 | 0.1 | 8 |
| 12 | 11.4...12.7 | 5 | 25 | 150 | 1 | 0.1 | 8 |
| 13 | 12.4...14.1 | 5 | 30 | 170 | 1 | 0.1 | 8 |
| 15 | 13.8...15.6 | 5 | 30 | 200 | 1 | 0.05 | 10 |
| 16 | 15.3...17.1 | 5 | 40 | 200 | 1 | 0.05 | 11 |
| 18 | 16.8...19.1 | 5 | 45 | 225 | 1 | 0.05 | 13 |
| 20 | 18.8...21.2 | 5 | 55 | 225 | 1 | 0.05 | 14 |
| 22 | 20.8...23.3 | 5 | 55 | 250 | 1 | 0.05 | 15 |
| 24 | 22.8...25.6 | 5 | 70 | 250 | 1 | 0.05 | 17 |
| 27 | 25.1...28.9 | 2 | 80 | 300 | 0.5 | 0.05 | 19 |
| 30 | 28...32 | 2 | 80 | 300 | 0.5 | 0.05 | 21 |
| 33 | 31...35 | 2 | 80 | 325 | 0.5 | 0.05 | 23 |
| 36 | 34...38 | 2 | 90 | 350 | 0.5 | 0.05 | 25 |
| 39 | 37...41 | 2 | 130 | 350 | 0.5 | 0.05 | 27 |
| 43 | 40...46 | 2 | 150 | 375 | 0.5 | 0.05 | 30 |
| 47 | 44...50 | 2 | 170 | 375 | 0.5 | 0.05 | 33 |
| 51 | 48...54 | 2 | 180 | 400 | 0.5 | 0.05 | 36 |
| 56 | 52...60 | 2 | 200 | 425 | 0.5 | 0.05 | 39 |
| 62 | 58...66 | 2 | 215 | 450 | 0.5 | 0.05 | 43 |
| 68 | 64...72 | 2 | 240 | 475 | 0.5 | 0.05 | 48 |
| 75 | 70...79 | 2 | 255 | 500 | 0.5 | 0.05 | 53 |

1) Tested with pulses $t_p = 20$ ms.**Kingtronics**® International Company

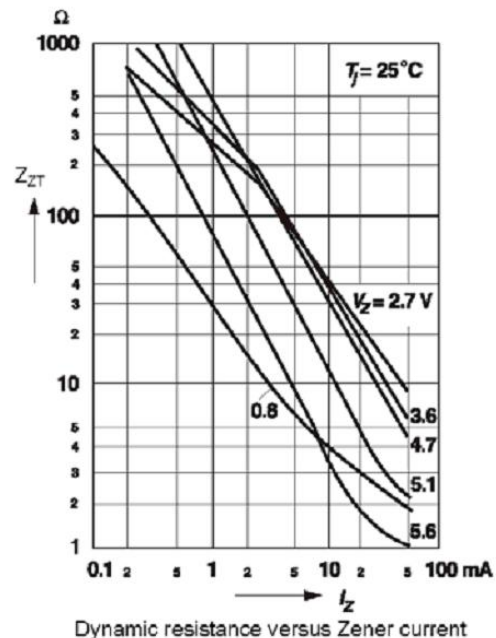
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BZV55C-SERIES SILICON PLANAR ZENER DIODES

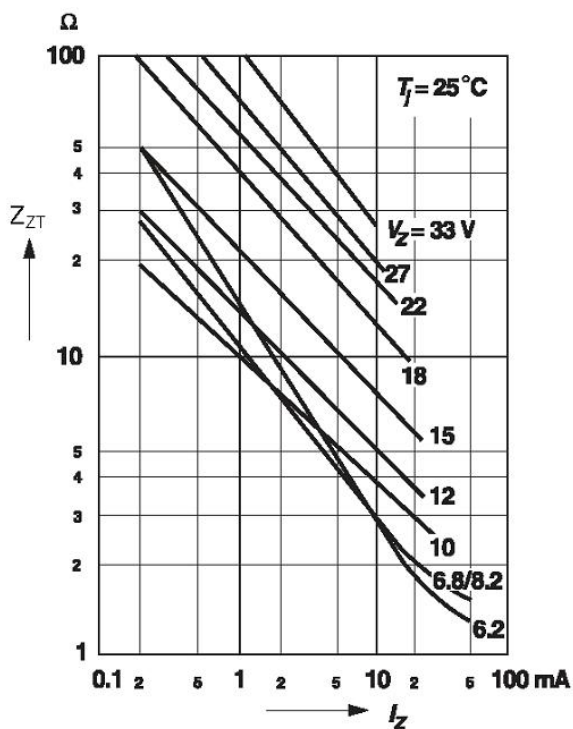
RATINGS AND CHARACTERISTIC CURVES BZV55



Typical forward current as a function of forward voltage



Dynamic resistance versus Zener current



Dynamic resistance versus Zener current

Note: Specifications are subject to change without notice.

Kingtronics® International Company

Website: www.kingtronics.com Email: info@kingtronics.com Tel: (852) 8106 7033 Fax: (852) 8106 7099