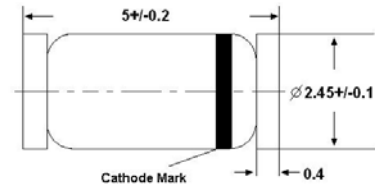


ZM2C

Silicon Planar Power Zener Diodes

For use in stabilizing and clipping circuits with high power rating. The Zener voltages are graded according to the international E 24 standard. Other voltage tolerances and higher Zener voltages are upon request.

LL-41



Glass case MELF
Dimensions in mm

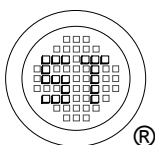
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

| Parameter | Symbol | Value | Unit |
|---------------------------|------------------|-----------------|------------------|
| Power Dissipation | P_{tot} | 2 ¹⁾ | W |
| Junction Temperature | T_j | 175 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 65 to + 175 | $^\circ\text{C}$ |

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

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

| Parameter | Symbol | Max. | Unit |
|--|--------|------|------|
| Forward Voltage at $I_F = 200\text{ mA}$ | V_F | 1.2 | V |



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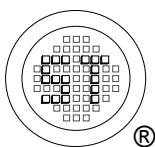
ZM2C

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

| Type | Zener Voltage ¹⁾ | | | Dynamic Resistance | | | Reverse Current | | Maximum DC Zener Current ²⁾ |
|---------|-----------------------------|-------------|-------------|--------------------|-------------------|-------------|------------------------|----------|--|
| | V_{Znom} | V_{ZT} | at I_{ZT} | Z_{ZT} | Z_{ZK} | at I_{ZK} | I_R | at V_R | |
| | (V) | (V) | (mA) | Max. (Ω) | Max. (Ω) | (mA) | Max. (μA) | (V) | I_{ZM} (mA) |
| ZM2C3V6 | 3.6 | 3.4...3.8 | 139 | 5 | 400 | 1 | 80 | 1 | 504 |
| ZM2C3V9 | 3.9 | 3.7...4.1 | 128 | 5 | 400 | 1 | 30 | 1 | 468 |
| ZM2C4V3 | 4.3 | 4...4.6 | 116 | 4.5 | 400 | 1 | 20 | 1 | 434 |
| ZM2C4V7 | 4.7 | 4.4...5 | 106 | 4.5 | 550 | 1 | 5 | 1 | 386 |
| ZM2C5V1 | 5.1 | 4.8...5.4 | 98 | 3.5 | 600 | 1 | 5 | 1 | 356 |
| ZM2C5V6 | 5.6 | 5.2...6 | 89.5 | 2.5 | 650 | 1 | 5 | 2 | 324 |
| ZM2C6V2 | 6.2 | 5.8...6.6 | 80.5 | 1.5 | 700 | 1 | 5 | 3 | 292 |
| ZM2C6V8 | 6.8 | 6.4...7.2 | 73.5 | 2 | 700 | 1 | 5 | 4 | 266 |
| ZM2C7V5 | 7.5 | 7...7.9 | 66.5 | 2 | 700 | 0.5 | 5 | 5 | 242 |
| ZM2C8V2 | 8.2 | 7.7...8.7 | 61 | 2.3 | 700 | 0.5 | 5 | 6 | 220 |
| ZM2C9V1 | 9.1 | 8.5...9.6 | 55 | 2.5 | 700 | 0.5 | 2 | 7 | 200 |
| ZM2C10 | 10 | 9.4...10.6 | 50 | 3.5 | 700 | 0.25 | 3 | 7.6 | 182 |
| ZM2C11 | 11 | 10.4...11.6 | 45.5 | 4 | 700 | 0.25 | 1 | 8.4 | 166 |
| ZM2C12 | 12 | 11.4...12.7 | 41.5 | 4.5 | 700 | 0.25 | 1 | 9.1 | 152 |
| ZM2C13 | 13 | 12.4...14.1 | 38.5 | 5 | 700 | 0.25 | 0.5 | 9.9 | 138 |
| ZM2C15 | 15 | 13.8...15.6 | 33.4 | 7 | 700 | 0.25 | 0.5 | 11.4 | 122 |
| ZM2C16 | 16 | 15.3...17.1 | 31.2 | 8 | 700 | 0.25 | 0.3 | 12.2 | 114 |
| ZM2C18 | 18 | 16.8...19.1 | 27.8 | 10 | 750 | 0.25 | 0.5 | 13.7 | 100 |
| ZM2C20 | 20 | 18.8...21.2 | 25 | 11 | 750 | 0.25 | 0.5 | 15.2 | 90 |
| ZM2C22 | 22 | 20.8...23.3 | 22.8 | 12 | 750 | 0.25 | 0.5 | 16.7 | 82 |
| ZM2C24 | 24 | 22.8...25.6 | 20.8 | 13 | 750 | 0.25 | 0.5 | 18.2 | 76 |
| ZM2C27 | 27 | 25.1...28.9 | 18.5 | 18 | 750 | 0.25 | 0.5 | 20.6 | 68 |
| ZM2C30 | 30 | 28...32 | 16.6 | 20 | 1000 | 0.25 | 0.5 | 22.5 | 60 |
| ZM2C33 | 33 | 31...35 | 15.1 | 23 | 1000 | 0.25 | 0.5 | 25.1 | 55 |
| ZM2C36 | 36 | 34...38 | 13.9 | 25 | 1000 | 0.25 | 0.5 | 27.4 | 50 |
| ZM2C39 | 39 | 37...41 | 12.8 | 30 | 1000 | 0.25 | 0.5 | 29.7 | 47 |
| ZM2C43 | 43 | 40...46 | 11.6 | 35 | 1500 | 0.25 | 0.5 | 32.7 | 43 |
| ZM2C47 | 47 | 44...50 | 10.6 | 40 | 1500 | 0.25 | 0.5 | 35.8 | 39 |
| ZM2C51 | 51 | 48...54 | 9.8 | 48 | 1500 | 0.25 | 0.5 | 38.8 | 36 |
| ZM2C56 | 56 | 52...60 | 9 | 55 | 2000 | 0.25 | 0.5 | 42.6 | 32 |
| ZM2C62 | 62 | 58...66 | 8.1 | 60 | 2000 | 0.25 | 0.5 | 47.1 | 29 |
| ZM2C68 | 68 | 64...72 | 7.4 | 75 | 2000 | 0.25 | 0.5 | 51.7 | 27 |
| ZM2C75 | 75 | 70...79 | 6.7 | 90 | 2000 | 0.25 | 0.5 | 56 | 24 |

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

²⁾ Valid provided that electrodes are kept at ambient temperature.



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