

$V_Z : 3.0 \text{ -- } 75 \text{ V}$

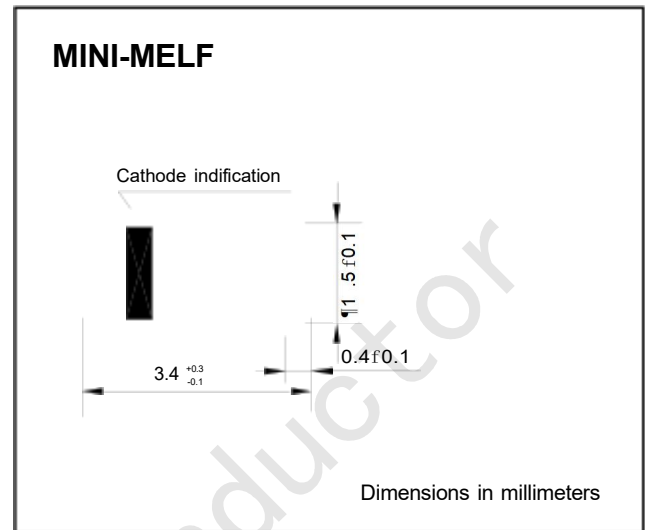
POWER DISSIPATION: 500 mW

FEATURES

Silicon planar power zener diodes.
Standard zener voltage tolerance is $\pm 5\%$ with a "B" suffix, and $\pm 10\%$ with a "A" suffix. Other tolerances are available upon request.

MECHANICAL DATA

Case: JEDEC MINI-MELF, glass case.
Terminals: Solderable per MIL-STD-202, Method 208
Polarity: Color band denotes cathodes end
Weight: approx. 0.031 gram
Mounting position: any



Maximum Ratings and Thermal Characteristics

($T_A = 25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|------------------|-------------|------------------|
| Zener current (see Table "Characteristics") | | | |
| Power dissipation at $T_{\text{amb}} = 75^\circ\text{C}$ (Note 1) | P_{tot} | 500.0 | mW |
| Maximum thermal resistance junction to ambient (Note 1) | R_{TJA} | 300 | K/W |
| Junction temperature | T_J | 175 | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55 to +175 | $^\circ\text{C}$ |

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

| | SYMBOL | MIN | TYP | MAX | UNIT |
|---|--------|-----|-----|------------|------|
| Forward voltage at $I_F = 100\text{mA}$ $I_F = 200\text{mA}$ | V_F | — | — | 1.0 1.2 | V |

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

ELECTRICAL CHARACTERISTICS (Ratings at 25°C ambient temperature unless otherwise specified)

| TYPE | Nominal zener voltage | | Maximum zener impedance | | Typical temperature coefficient | Maximum reverse leakage current | | Maximum DC zener current |
|----------|-----------------------|----------|-------------------------|-------------------|---------------------------------|---------------------------------|-----|--------------------------|
| | $V_Z @ I_{ZT}$ | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | | $I_R @ V_R$ | | |
| | (V) | (mA) | (Ω) | (Ω) | %/°C | (μ A) | (V) | (mA) |
| ZMM5225B | 3.0 | 20 | 29 | 1600 | -0.075 | 50 | 1.0 | 151 |
| ZMM5226B | 3.3 | 20 | 28 | 1600 | -0.070 | 25 | 1.0 | 138 |
| ZMM5227B | 3.6 | 20 | 24 | 1700 | -0.065 | 15 | 1.0 | 126 |
| ZMM5228B | 3.9 | 20 | 23 | 1900 | -0.060 | 10 | 1.0 | 115 |
| ZMM5229B | 4.3 | 20 | 22 | 2000 | -0.055 | 5.0 | 1.0 | 106 |
| ZMM5230B | 4.7 | 20 | 19 | 1900 | ± 0.030 | 5.0 | 2.0 | 97 |
| ZMM5231B | 5.1 | 20 | 17 | 1600 | ± 0.030 | 5.0 | 2.0 | 89 |
| ZMM5232B | 5.6 | 20 | 11 | 1600 | +0.038 | 5.0 | 3.0 | 81 |
| ZMM5233B | 6.0 | 20 | 7 | 1600 | +0.038 | 5.0 | 3.5 | 76 |
| ZMM5234B | 6.2 | 20 | 7 | 1000 | +0.045 | 5.0 | 4.0 | 73 |
| ZMM5235B | 6.8 | 20 | 5 | 750 | +0.050 | 3.0 | 5.0 | 67 |
| ZMM5236B | 7.5 | 20 | 6 | 500 | +0.058 | 3.0 | 6.0 | 61 |
| ZMM5237B | 8.2 | 20 | 8 | 500 | +0.062 | 3.0 | 6.5 | 55 |
| ZMM5238B | 8.7 | 20 | 8 | 600 | +0.065 | 3.0 | 6.5 | 52 |
| ZMM5239B | 9.1 | 20 | 10 | 600 | +0.068 | 3.0 | 7.0 | 50 |
| ZMM5240B | 10 | 20 | 17 | 600 | +0.075 | 3.0 | 8.0 | 45 |
| ZMM5241B | 11 | 20 | 22 | 600 | +0.076 | 2.0 | 8.4 | 41 |
| ZMM5242B | 12 | 20 | 30 | 600 | +0.077 | 1.0 | 9.1 | 38 |
| ZMM5243B | 13 | 9.5 | 13 | 600 | +0.079 | 0.5 | 9.9 | 35 |
| ZMM5244B | 14 | 9.0 | 15 | 600 | +0.082 | 0.1 | 10 | 32 |
| ZMM5245B | 15 | 8.5 | 16 | 600 | +0.082 | 0.1 | 11 | 30 |
| ZMM5246B | 16 | 7.8 | 17 | 600 | +0.083 | 0.1 | 12 | 28 |
| ZMM5247B | 17 | 7.4 | 19 | 600 | +0.084 | 0.1 | 13 | 27 |
| ZMM5248B | 18 | 7.0 | 21 | 600 | +0.085 | 0.1 | 14 | 25 |
| ZMM5249B | 19 | 6.6 | 23 | 600 | +0.086 | 0.1 | 14 | 24 |
| ZMM5250B | 20 | 6.2 | 25 | 600 | +0.086 | 0.1 | 15 | 23 |
| ZMM5251B | 22 | 5.6 | 29 | 600 | +0.087 | 0.1 | 17 | 21.2 |
| ZMM5252B | 24 | 5.2 | 33 | 600 | +0.087 | 0.1 | 18 | 19.1 |
| ZMM5253B | 25 | 5.0 | 35 | 600 | +0.089 | 0.1 | 19 | 18.2 |
| ZMM5254B | 27 | 4.6 | 41 | 600 | +0.090 | 0.1 | 21 | 16.8 |
| ZMM5255B | 28 | 4.5 | 44 | 600 | +0.091 | 0.1 | 21 | 16.2 |
| ZMM5256B | 30 | 4.2 | 49 | 600 | +0.091 | 0.1 | 23 | 15.1 |
| ZMM5257B | 33 | 3.8 | 58 | 700 | +0.092 | 0.1 | 25 | 13.8 |
| ZMM5258B | 36 | 3.4 | 70 | 700 | +0.093 | 0.1 | 27 | 12.6 |
| ZMM5259B | 39 | 3.2 | 80 | 800 | +0.094 | 0.1 | 30 | 11.5 |
| ZMM5260B | 43 | 3.0 | 93 | 900 | +0.095 | 0.1 | 33 | 10.6 |
| ZMM5261B | 47 | 2.7 | 105 | 1000 | +0.095 | 0.1 | 36 | 9.7 |
| ZMM5262B | 51 | 2.5 | 125 | 1100 | +0.096 | 0.1 | 39 | 8.9 |
| ZMM5263B | 56 | 2.2 | 150 | 1300 | +0.096 | 0.1 | 43 | - |
| ZMM5264B | 60 | 2.1 | 170 | 1400 | +0.097 | 0.1 | 46 | - |
| ZMM5265B | 62 | 2.0 | 185 | 1400 | +0.097 | 0.1 | 47 | - |
| ZMM5266B | 68 | 1.8 | 230 | 1600 | +0.097 | 0.1 | 52 | - |
| ZMM5267B | 75 | 1.7 | 270 | 1700 | +0.098 | 0.1 | 56 | - |

FIG.1 -- BREAKDOWN CHARACTERISTICS

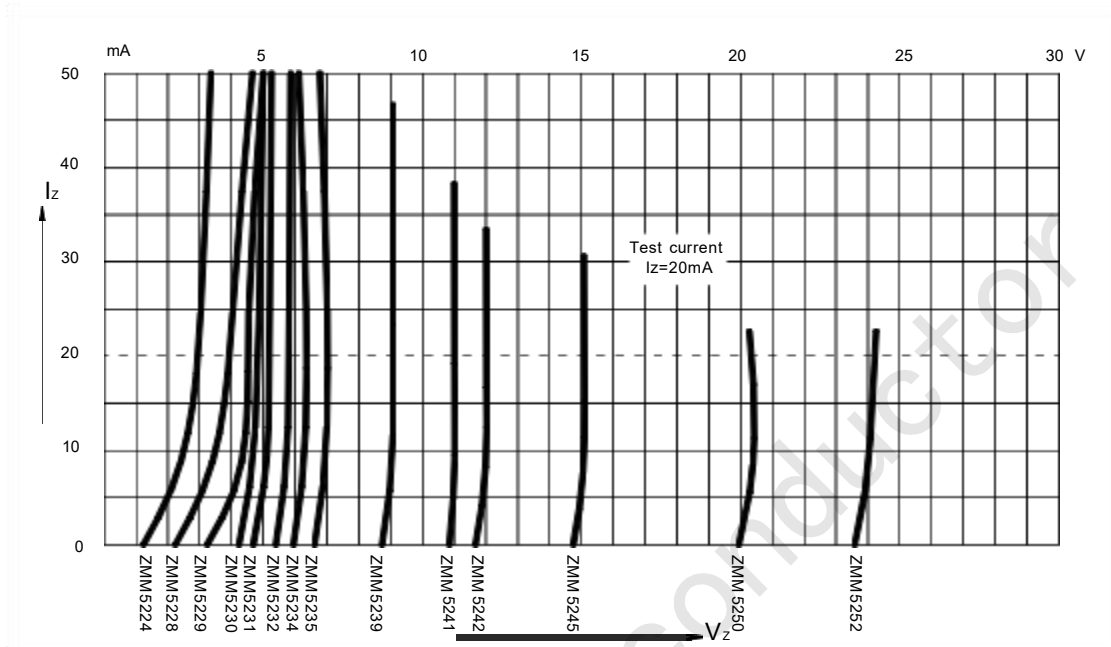


FIG.2 -- ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE

