



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

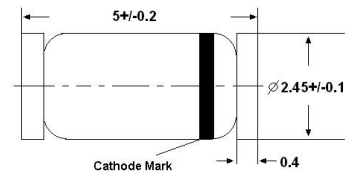
TEL: 852-2790 0314 FAX: 852-2790 0206

ZMY1...ZMY100

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. Smaller voltage tolerances are upon request.

LL-41



Glass case MELF
Dimensions in mm

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

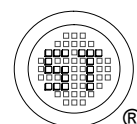
| Parameter | Symbol | Value | Unit |
|---------------------------|------------------|-----------------|------------------|
| Power Dissipation | P_{tot} | 1 ¹⁾ | W |
| Junction Temperature | T_j | 175 | $^\circ\text{C}$ |
| Storage Temperature Range | T_s | - 55 to + 175 | $^\circ\text{C}$ |

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

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

| Parameter | Symbol | Max. | Unit |
|--|------------------|-------------------|------|
| Thermal Resistance Junction to Ambient Air | R_{thA} | 170 ¹⁾ | K/W |

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



Dated :04/09/2008



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

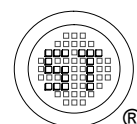
| Type | Zener Voltage ²⁾ | | Maximum Dynamic Resistance | | Maximum Reverse Leakage Current | | Admissible Zener Current ¹⁾ |
|--------------------|-----------------------------|------------------|----------------------------|------------------|---------------------------------|--------------|--|
| | V_Z (V) | at I_{ZT} (mA) | Z_{ZT} (Ω) | at I_{ZT} (mA) | I_R (μA) | at V_R (V) | I_Z (mA) |
| ZMY1 ³⁾ | 0.65...0.75 | 5 | 8 | 5 | - | - | 406 |
| ZMY3V0 | 2.8...3.2 | 100 | 8 | 100 | - | - | 260 |
| ZMY3V3 | 3.1...3.5 | 100 | 8 | 100 | 150 | 1 | 240 |
| ZMY3V6 | 3.4...3.8 | 100 | 8 | 100 | 100 | 1 | 220 |
| ZMY3V9 | 3.7...4.1 | 100 | 7 | 100 | 100 | 1 | 203 |
| ZMY4V3 | 4...4.6 | 100 | 7 | 100 | 50 | 1 | 182 |
| ZMY4V7 | 4.4...5 | 100 | 7 | 100 | 10 | 1 | 165 |
| ZMY5V1 | 4.8...5.4 | 100 | 5 | 100 | 10 | 1 | 150 |
| ZMY5V6 | 5.2...6 | 100 | 2 | 100 | 0.5 | 2 | 135 |
| ZMY6V2 | 5.8...6.6 | 100 | 2 | 100 | 0.5 | 3 | 128 |
| ZMY6V8 | 6.4...7.2 | 100 | 2 | 100 | 0.5 | 4 | 110 |
| ZMY7V5 | 7...7.9 | 100 | 2 | 100 | 0.5 | 5 | 100 |
| ZMY8V2 | 7.7...8.7 | 100 | 2 | 100 | 0.5 | 6 | 89 |
| ZMY9V1 | 8.5...9.6 | 50 | 4 | 50 | 0.5 | 7 | 82 |
| ZMY10 | 9.4...10.6 | 50 | 4 | 50 | 0.5 | 7.6 | 74 |
| ZMY11 | 10.4...11.6 | 50 | 7 | 50 | 0.5 | 8.4 | 66 |
| ZMY12 | 11.4...12.7 | 50 | 7 | 50 | 0.5 | 9.1 | 60 |
| ZMY13 | 12.4...14.1 | 50 | 9 | 50 | 0.5 | 9.9 | 55 |
| ZMY15 | 13.8...15.8 | 50 | 9 | 50 | 0.5 | 11.4 | 49 |
| ZMY16 | 15.3...17.1 | 25 | 10 | 25 | 0.5 | 12.2 | 44 |
| ZMY18 | 16.8...19.1 | 25 | 11 | 25 | 0.5 | 13.7 | 40 |
| ZMY20 | 18.8...21.2 | 25 | 12 | 25 | 0.5 | 15.2 | 36 |
| ZMY22 | 20.8...23.3 | 25 | 13 | 25 | 0.5 | 16.7 | 34 |
| ZMY24 | 22.8...25.6 | 25 | 14 | 25 | 0.5 | 18.2 | 29 |
| ZMY27 | 25.1...28.9 | 25 | 15 | 25 | 0.5 | 20.6 | 27 |
| ZMY30 | 28...32 | 25 | 20 | 25 | 0.5 | 22.8 | 25 |
| ZMY33 | 31...35 | 25 | 20 | 25 | 0.5 | 25.1 | 22 |
| ZMY36 | 34...38 | 10 | 60 | 10 | 0.5 | 27.4 | 20 |
| ZMY39 | 37...41 | 10 | 60 | 10 | 0.5 | 29.7 | 18 |
| ZMY43 | 40...46 | 10 | 80 | 10 | 0.5 | 32.7 | 17 |
| ZMY47 | 44...50 | 10 | 80 | 10 | 0.5 | 35.8 | 15 |
| ZMY51 | 48...54 | 10 | 100 | 10 | 0.5 | 38.8 | 14 |
| ZMY56 | 52...60 | 10 | 100 | 10 | 0.5 | 42.6 | 13 |
| ZMY62 | 58...66 | 10 | 130 | 10 | 0.5 | 47.1 | 11 |
| ZMY68 | 64...72 | 10 | 130 | 10 | 0.5 | 51.7 | 10 |
| ZMY75 | 70...79 | 10 | 160 | 10 | 0.5 | 56.0 | 9 |
| ZMY82 | 77...88 | 10 | 160 | 10 | 0.5 | 62.2 | 8 |
| ZMY91 | 85...96 | 5 | 250 | 5 | 0.5 | 69.2 | 7.5 |
| ZMY100 | 94...106 | 5 | 250 | 5 | 0.5 | 76 | 7 |

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

²⁾ Tested with pulses $t_p = 20\text{ ms}$

³⁾ The ZMY1 is a silicon diode operated in forward direction. Hence, the index of all characteristics and maximum ratings should be "F" instead of "Z". Connect the cathode terminal to the negative pole.

For devices in glass case MELF with higher Zener voltage but same power dissipation see types ZMU100...ZMU180.



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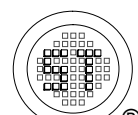
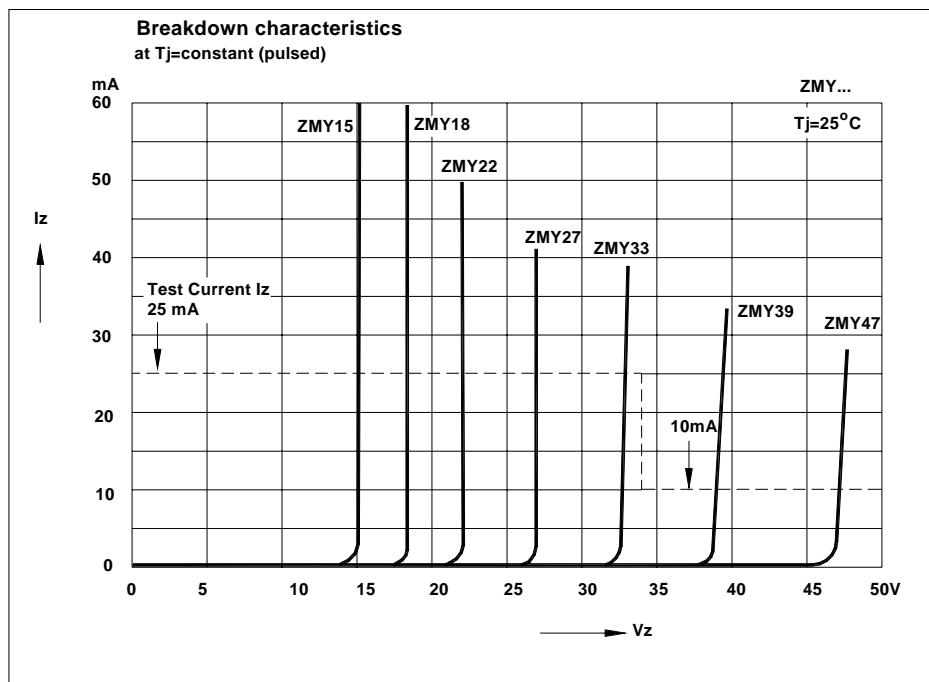
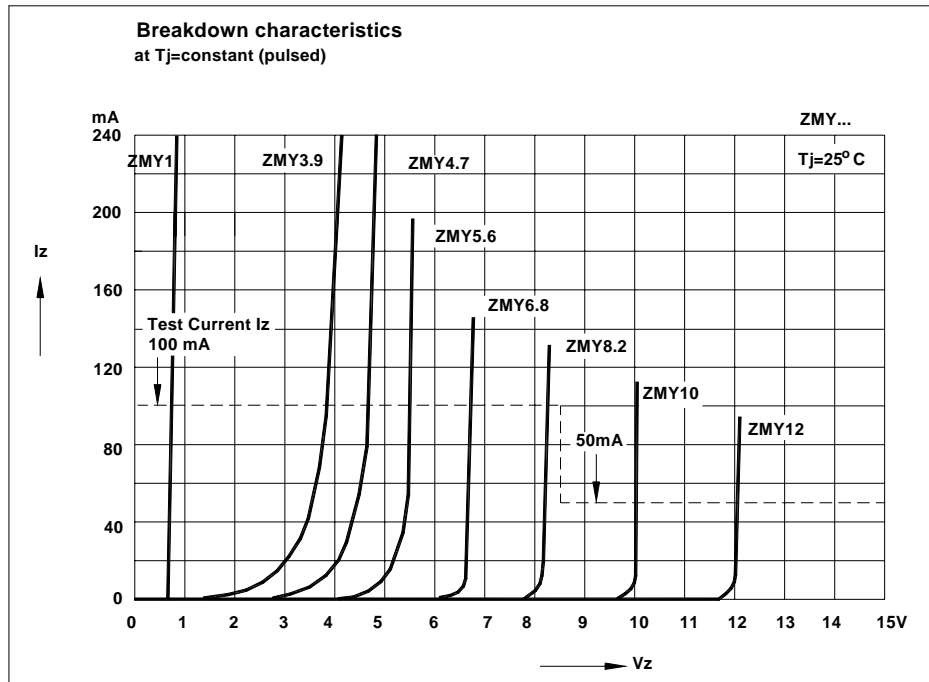
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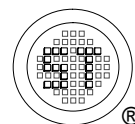
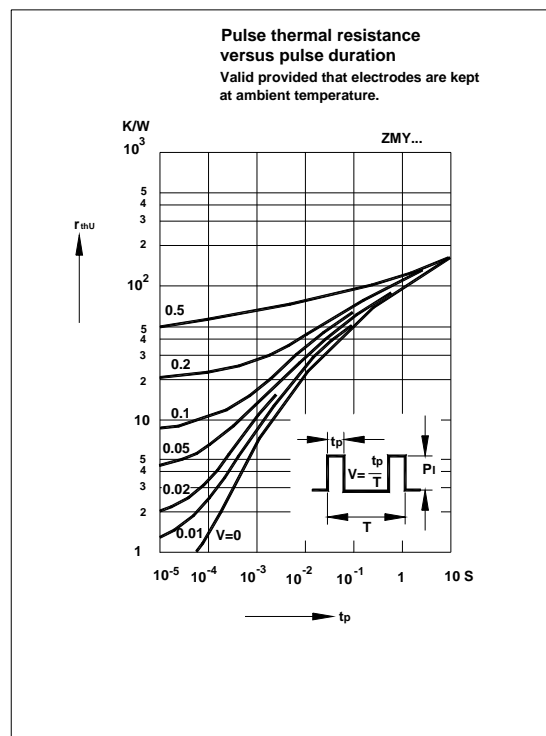
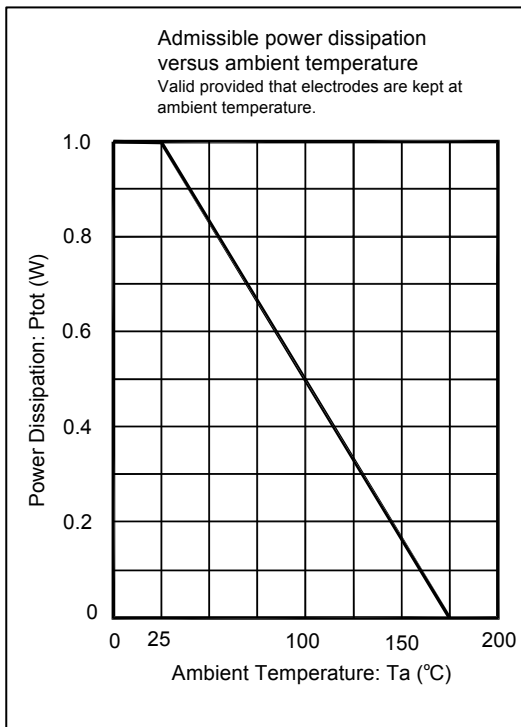
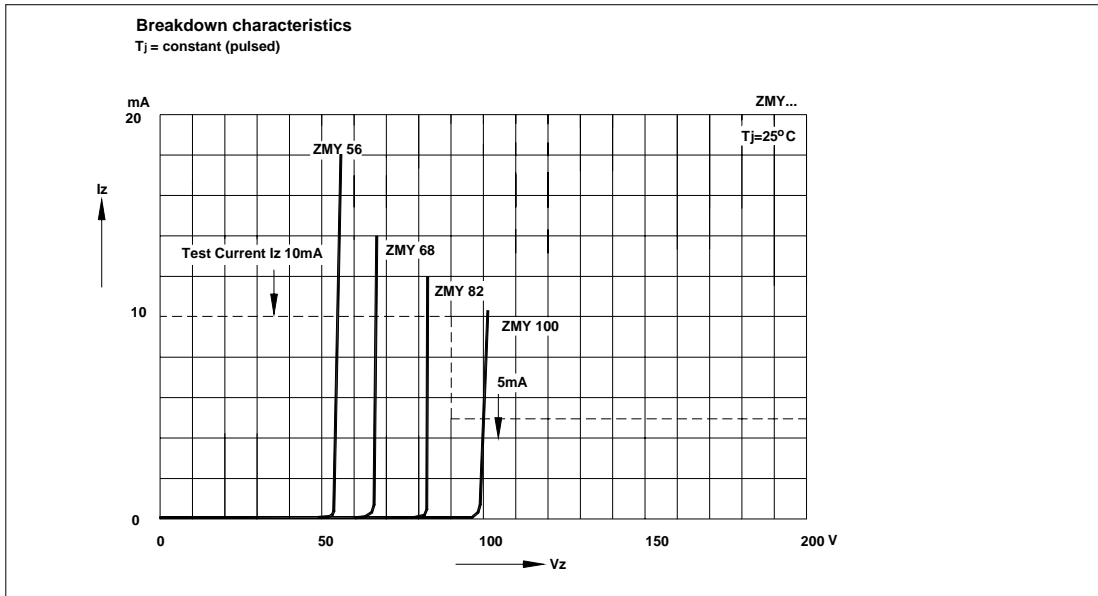
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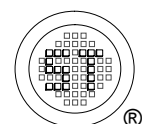
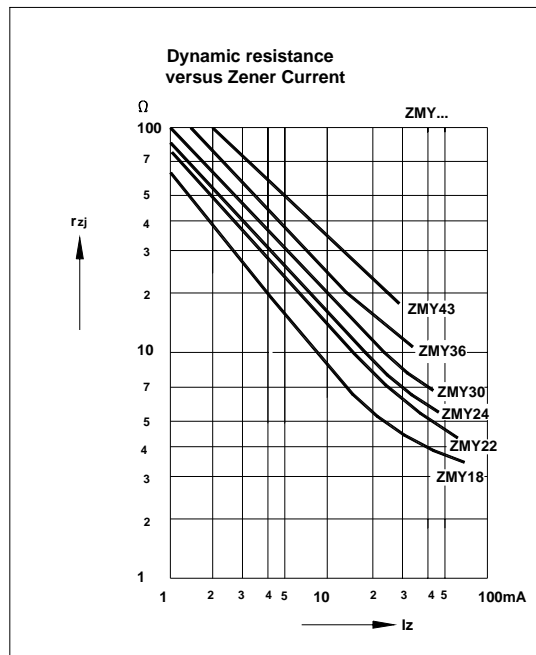
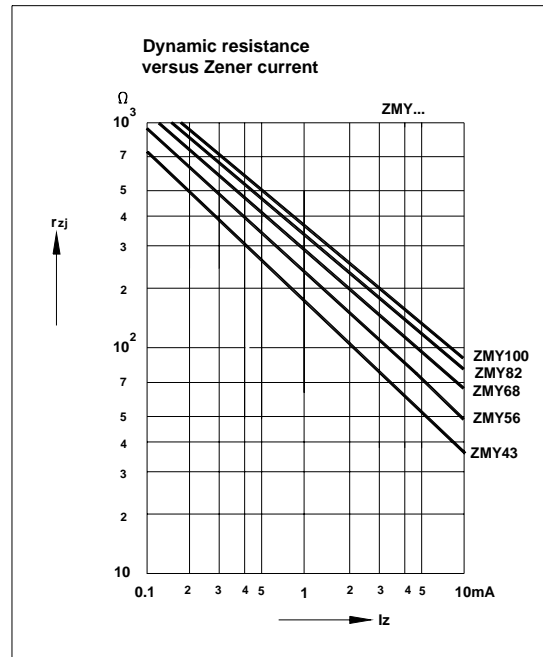
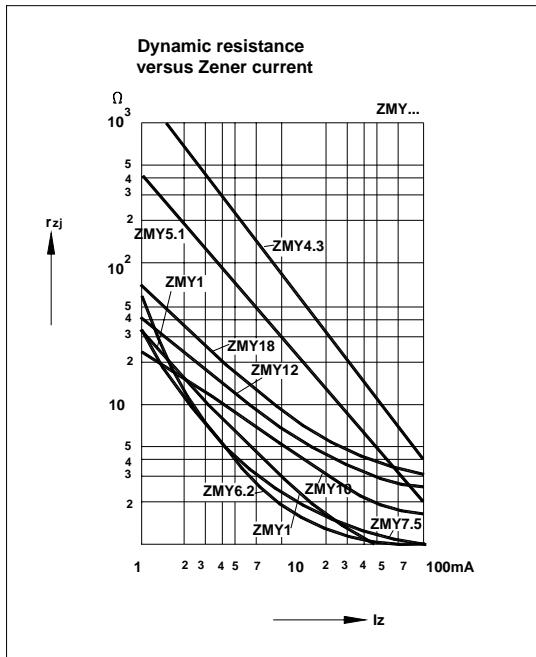
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