

MAZWxxxHG Series

Silicon planar type

For surge absorption circuit

■ Features

- Two elements anode-common type

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

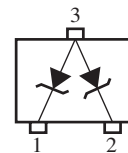
| Parameter | Symbol | Rating | Unit |
|---------------------------|------------------|-------------|------------------|
| Total power dissipation * | P_{tot} | 150 | mW |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

Note) *: $P_{\text{tot}} = 150$ mW achieved with a printed circuit board.

■ Package

- Code
SSSMini3-F2
- Pin Name
1: Cathode 1
2: Cathode 2
3: Anode 1, 2

■ Internal Connection



■ Common Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---------------------------------|----------|-----------------------|-----|-----|-----|---------------|
| Zener voltage * | V_Z | I_Z Specified value | | | | V |
| Zener rise operating resistance | R_{ZK} | I_Z Specified value | | | | Ω |
| Zener operating resistance | R_Z | I_Z Specified value | | | | Ω |
| Reverse current | I_R | V_R Specified value | | | | μA |

Refer to the list of the electrical characteristics within part numbers

Note) 1. Measuring methods are based JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Electrostatic breakdown voltage is ± 10 kV

Test method: IEC1000-4-2 (C = 150 pF, R = 330 Ω , Contact discharge: 10 times)

3. *: The temperature must be controlled 25°C for V_Z measurement.

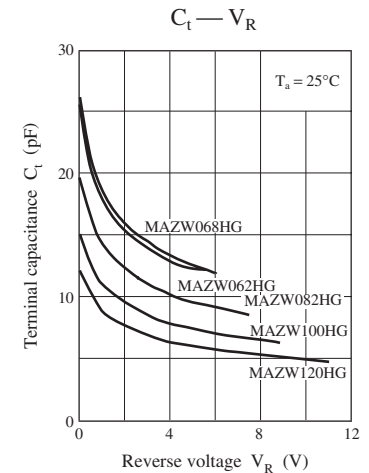
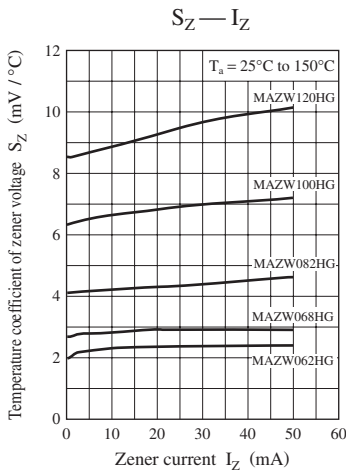
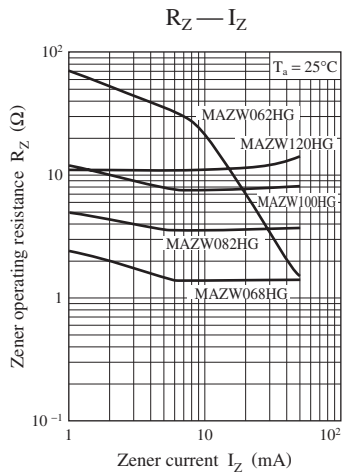
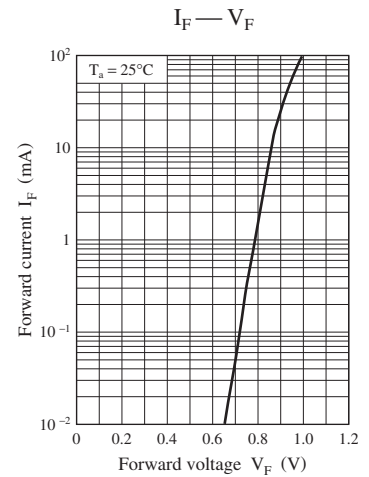
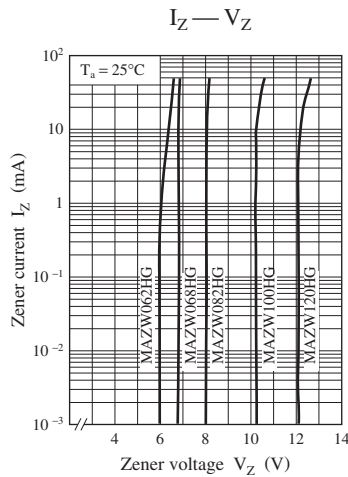
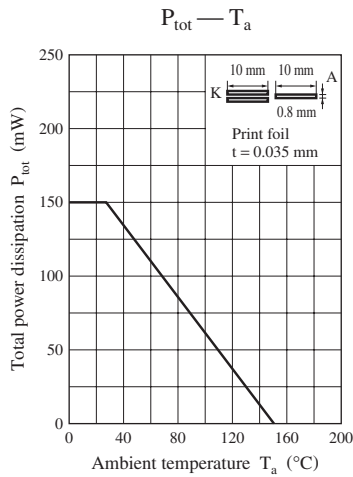
V_Z value measured at other temperature must be adjusted to $V_Z (25^\circ\text{C})$

V_Z guaranteed 20 ms after current flow.

■ Electrical characteristics within part numbers $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

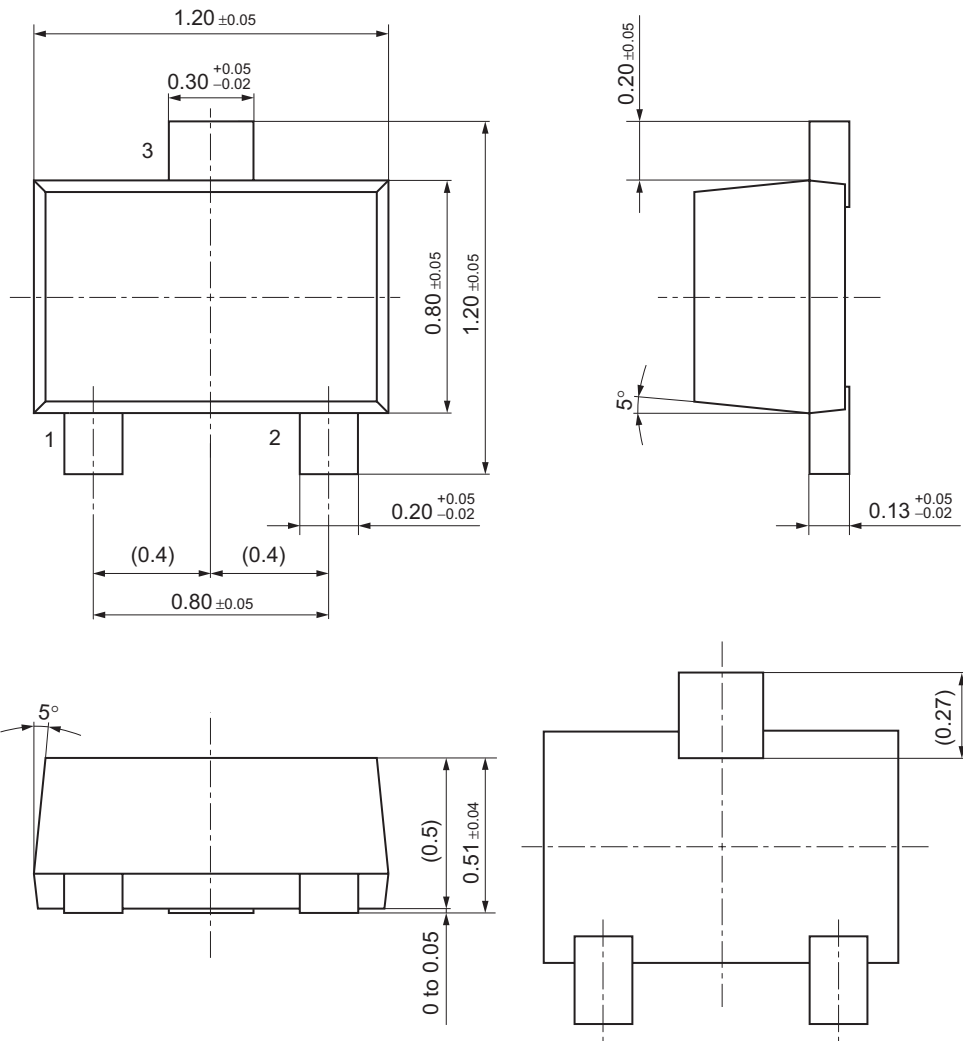
| Part number | Zener voltage | | | | Reverse current (DC) | | Zener operating resistance | | Marking symbol |
|-------------|---------------|------|------|------------|-------------------------|-----------|-----------------------------|-------------------------------|----------------|
| | V_Z (V) | | | | I_R (μA) | | R_Z (Ω) | R_{ZK} (Ω) | |
| | Min | Nom | Max | I_Z (mA) | Max | V_R (V) | $I_Z = 5 \text{ mA}$ Max | $I_Z = 0.5 \text{ mA}$ Max | |
| MAZW062HG | 5.8 | 6.2 | 6.6 | 5 | 0.2 | 4 | 50 | 100 | 62 |
| MAZW068HG | 6.4 | 6.8 | 7.2 | 5 | 0.1 | 4 | 30 | 60 | 68 |
| MAZW082HG | 7.7 | 8.2 | 8.7 | 5 | 0.1 | 5 | 30 | 60 | 82 |
| MAZW100HG | 9.4 | 10.0 | 10.6 | 5 | 0.05 | 7 | 30 | 60 | 10 |
| MAZW120HG | 11.4 | 12.0 | 12.7 | 5 | 0.05 | 9 | 30 | 60 | 12 |

- Note) 1. The V_Z value is the one after power application for 20 ms at $T_a = 25^\circ\text{C}$.
 2. The zener voltage temperature coefficient is the one for $T_j = 25^\circ\text{C}$ to 150°C .



SSSMini3-F2

Unit: mm



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