

# MAZLxxxH Series

## Silicon planar type

For surge absorption circuit

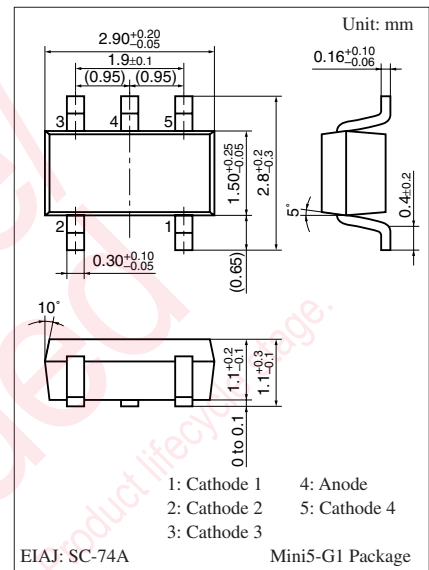
### ■ Features

- Four elements anode-common type
- Power dissipation  $P_D$  : 200 mW

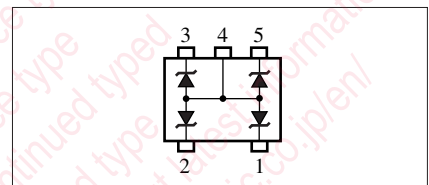
### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter            | Symbol    | Rating      | Unit             |
|----------------------|-----------|-------------|------------------|
| Power dissipation *  | $P_D$     | 200         | mW               |
| Junction temperature | $T_j$     | 150         | $^\circ\text{C}$ |
| Storage temperature  | $T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |

Note) \*:  $P_D = 200$  mW achieved with a printed circuit board.



### 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 |     |     |     | $\Omega$      |
| Zener operating resistance      | $R_Z$    | $I_Z$ Specified value |     |     |     | $\Omega$      |
| Reverse current                 | $I_R$    | $V_R$ Specified value |     |     |     | $\mu\text{A}$ |

Refer to the list of the electrical characteristics within part numbers

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

2. Electrostatic breakdown voltage:  $\pm 10$  kV

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

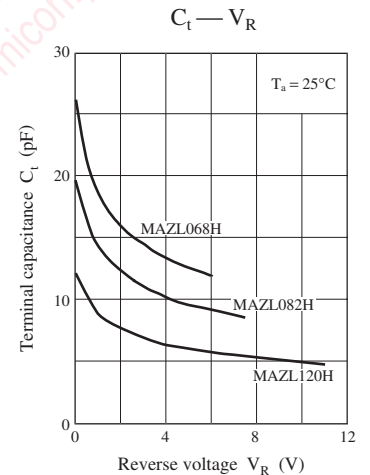
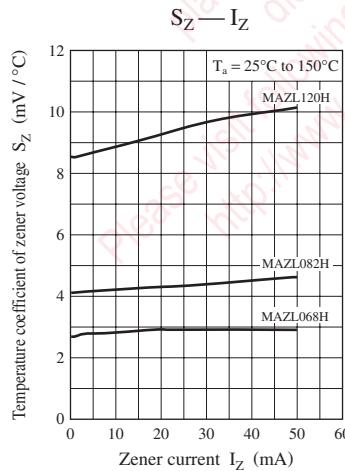
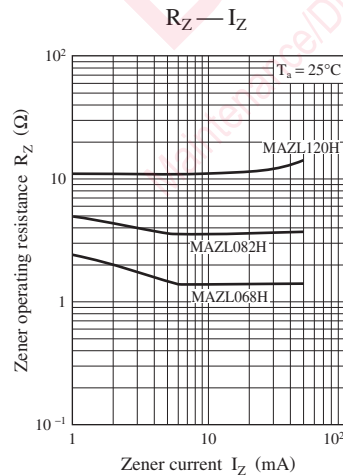
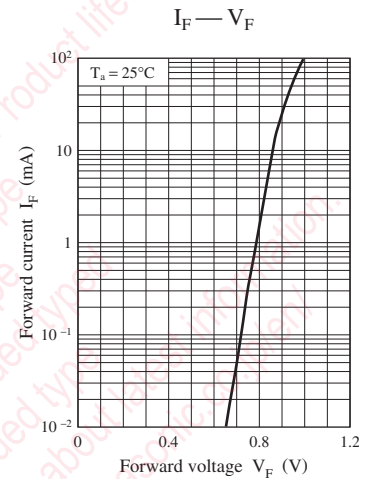
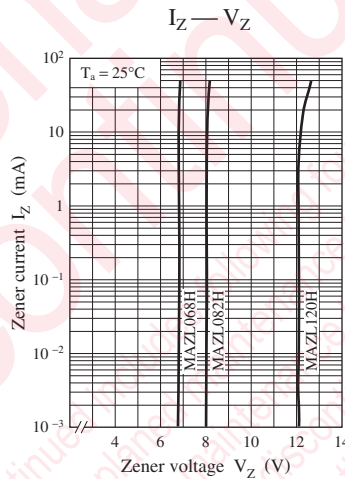
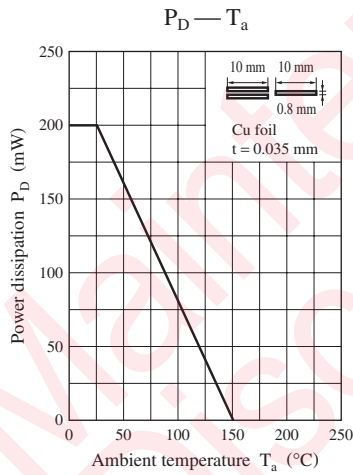
3. \*: The temperature must be controlled  $25^\circ\text{C}$  for  $V_Z$  measurement.

$V_Z$  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 |           | Zener operating resistance | Zener rise operating resistance | Marking symbol |
|-------------|---------------|------|------|------------|-----------------|-----------|----------------------------|---------------------------------|----------------|
|             | $V_Z$ (V)     |      |      | $I_Z$ (mA) | $I_R$ (mA)      | $V_R$ (V) | $R_Z$ ( $\Omega$ )         | $R_{ZK}$ ( $\Omega$ )           |                |
|             | Min           | Nom  | Max  |            |                 |           | $I_Z = 5$ mA               | $I_Z = 0.5$ mA                  |                |
| MAZL068H    | 6.4           | 6.8  | 7.2  | 5          | 0.1             | 4         | 30                         | 60                              | 6.8Z           |
| MAZL082H    | 7.7           | 8.2  | 8.7  | 5          | 0.1             | 5         | 30                         | 60                              | 8.2Z           |
| MAZL120H    | 11.4          | 12.0 | 12.7 | 5          | 0.05            | 9         | 30                         | 80                              | 12Z            |



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