MAZL000H Series

Silicon planar type

For surge absorption circuit

Features

- Four elements anode-common type
- $P_{tot} = 200 \text{ mW}$

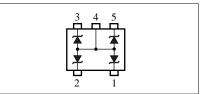
| 2.90+0.20 | | Unit: mm |
|---|---|------------------|
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 0.16+0.10 |
| | (0.65) 1.50 ^{-0.25} 2.8 ^{-0.25} | 0.4+00- |
| | 0 to 0.1 | |
| | 1: Cathode 1 | 4: Anode 1, 2 |
| | 2: Cathode 2 | <i>'</i> |
| | 3: Cathode 3 | 5: Cathode 4 |
| EIAJ: SC-74A | | Mini5-G1 Package |

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

| Parameter | Symbol | Rating | Unit |
|---------------------------|------------------|-------------|------|
| Total power dissipation * | P _{tot} | 200 | mW |
| Junction temperature | Tj | 150 | °C |
| Storage temperature | T _{stg} | -55 to +150 | °C |

Note) *: With a printed circuit board

Internal Connection



Common Electrical Characteristics $T_a = 25^{\circ}C^{*1}$

| Parameter | Symbol | | Conditions | Min | Тур | Max | Unit | |
|---------------------------------|-----------------|----------------|-----------------|---|-----|-----|------|----|
| Zener voltage ^{*2} | VZ | IZ | Specified value | | | | | v |
| Zener knee operating resistance | R _{ZK} | IZ | Specified value | Refer to the list of the electrical characteristics within part numbers | | | | Ω |
| Zener operating resistance | R _Z | IZ | Specified value | | | | | Ω |
| Reverse current | I _R | V _R | Specified value | | | | | μΑ |

Note) 1. Test method according to the JIS C7031 testing

2. Electrostatic breakdown voltage is $\pm 10 \text{ kV}$

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

3. *1: The V_Z value is for the temperature of 25°C. In other cases, carry out the temperature compensation.

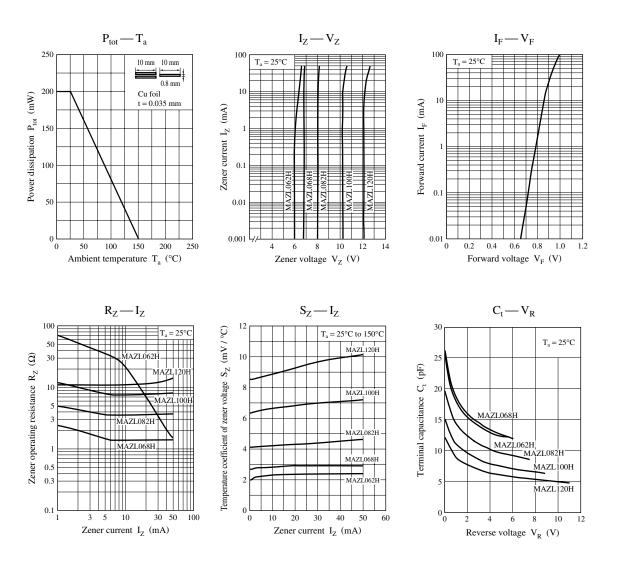
*2: Guaranteed at 20 ms after power application.

| | Zener voltage | | | Reverse current | | Zener operating resistance | | | |
|-------------|---------------|--------------------|------|------------------------|---------------------|-------------------------------|--|----------------|------|
| Part number | | V _Z (V) | | I _R (I | I _R (mA) | | $R_{ZK}(\Omega)$ $I_{z} = 0.5 \text{ mA}$ | Marking symbol | |
| | Min | Nom | Max | 1 _Z (mA) | Max | • R (V) | l _z = 5 mA Max | Max | |
| MAZL062H | 5.8 | 6.2 | 6.6 | 5 | 0.2 | 4 | 50 | 100 | 6.2Z |
| 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 |
| MAZL100H | 9.4 | 10.0 | 10.6 | 5 | 0.05 | 7 | 30 | 60 | 10Z |
| MAZL120H | 11.4 | 12.0 | 12.7 | 5 | 0.05 | 9 | 30 | 80 | 12Z |

Electrical characteristics within part numbers $T_a = 25^{\circ}C$

Note) 1. The V_Z value is the one after power application for 20 ms at $T_a = 25^{\circ}C$.

2. The zener voltage temperature coefficient is the one for $T_j = 25^{\circ}C$ to $150^{\circ}C$.



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