

MAZU000 Series

Silicon planar type

For constant voltage, constant-current, waveform clipper and surge absorption circuit

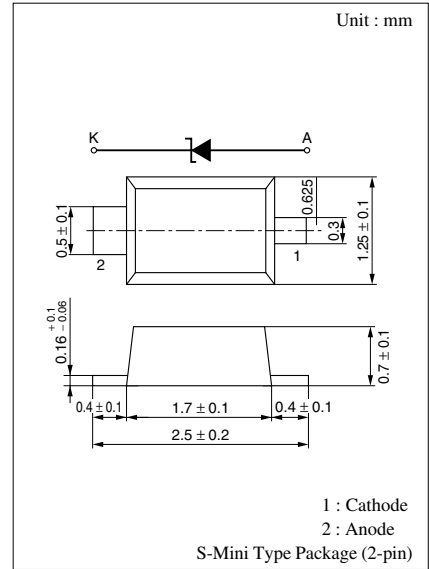
■ Features

- S-mini type 2-pin package
- High breakdown voltage zener diode

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

| Parameter | Symbol | Rating | Unit |
|-----------------------------|-----------|-------------|------------------|
| Instantious forward current | I_{FRM} | 200 | mA |
| 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) * : With a printed-circuit board



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

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|--|--------|-----------------------------|---|-----|-----|----------------------|
| Forward voltage | V_F | $I_F = 10 \text{ mA}$ | | | 1.2 | V |
| Zener voltage ^{*2} | V_Z | I_Z Specified value | Refer to the list of the electrical characteristics within part numbers | | | V |
| Reverse current | I_R | V_R Specified value | | | | μA |
| Temperature coefficient of zener voltage | S_Z | I_Z Specified value | | | | mW/ $^\circ\text{C}$ |

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

2. Rated input/output frequency: 5 MHz

2. *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.

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

| Part Number | Zener voltage | | | | Reverse current | | Temperature coefficient of zener voltage | | Marking Symbol |
|-------------|---------------|---------|---------|------------|-----------------------|-----------|--|------------|----------------|
| | V_Z (V) | | | | I_R | | S_Z | | |
| | Min (V) | Nom (V) | Max (V) | I_Z (mA) | Max (μA) | V_R (V) | Typ ($^\circ\text{C}$) | I_Z (mA) | |
| MAZU190 | 180 | 190 | 200 | 0.1 | 1 | 160 | 0.22 | 0.1 | AZ |
| MAZU200 | 190 | 200 | 210 | 0.1 | 1 | 160 | 0.31 | 0.1 | AA or AB |
| MAZU200-L | | | AA | | | | | | |
| MAZU200-H | | | AB | | | | | | |
| MAZU220 | 210 | 220 | 240 | 0.1 | 1 | 176 | 0.31 | 0.1 | AC or AD |
| MAZU220-L | | | 230 | | | | | | AC |
| MAZU220-H | | | 240 | | | | | | AD |
| MAZU240 | 230 | 240 | 270 | 0.1 | 1 | 192 | 0.31 | 0.1 | AE or AF or AH |
| MAZU240-L | | | 250 | | | | | | AE |
| MAZU240-M | | | 260 | | | | | | AF |
| MAZU240-H | | | 270 | | | | | | AH |
| MAZU270 | 260 | 270 | 300 | 0.1 | 1 | 216 | 0.31 | 0.1 | AI or AK or AL |
| MAZU270-L | | | 280 | | | | | | AI |
| MAZU270-M | | | 290 | | | | | | AK |
| MAZU270-H | | | 300 | | | | | | AL |
| MAZU300 | 290 | 300 | 330 | 0.1 | 1 | 240 | 0.31 | 0.1 | AM or AN or AO |
| MAZU300-L | | | 310 | | | | | | AM |
| MAZU300-M | | | 320 | | | | | | AN |
| MAZU300-H | | | 330 | | | | | | AO |
| MAZU330 | 320 | 330 | 360 | 0.1 | 1 | 264 | 0.31 | 0.1 | AP or AR or AS |
| MAZU330-L | | | 340 | | | | | | AP |
| MAZU330-M | | | 350 | | | | | | AR |
| MAZU330-H | | | 360 | | | | | | AS |

