

# MAZSxxxG Series

## Silicon planar type

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

### ■ Features

- Low noise type
- $V_Z$  rank classified ( $V_Z = 2.4\text{ V to }39\text{ V}$ )

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

| Parameter                       | Symbol    | Rating      | Unit             |
|---------------------------------|-----------|-------------|------------------|
| Repetitive peak 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

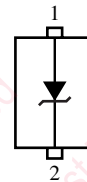
### ■ Package

- Code  
SSMini2-F4
- Pin Name  
1: Anode  
2: Cathode

### ■ Marking Symbol

Refer to the list of the electrical characteristics within part numbers

### ■ Internal Connection



### ■ Common Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$ \*1

| Parameter                                   | Symbol   | Conditions            | Min                                                                     | Typ | Max | Unit                 |
|---------------------------------------------|----------|-----------------------|-------------------------------------------------------------------------|-----|-----|----------------------|
| Forward voltage                             | $V_F$    | $I_F = 10\text{ mA}$  |                                                                         | 0.9 | 1.0 | V                    |
| Zener voltage *2                            | $V_Z$    | $I_Z$ Specified value |                                                                         |     |     | V                    |
| Reverse current                             | $I_R$    | $V_R$ Specified value | Refer to the list of the electrical characteristics within part numbers |     |     | $\mu\text{A}$        |
| Zener rise operating resistance             | $R_{ZK}$ | $I_Z$ Specified value |                                                                         |     |     | $\Omega$             |
| Zener operating resistance                  | $R_Z$    | $I_Z$ Specified value |                                                                         |     |     | $\Omega$             |
| Temperature coefficient of zener voltage *3 | $S_Z$    | $I_Z$ Specified value |                                                                         |     |     | mV/ $^\circ\text{C}$ |

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

2. Rated input/output frequency: 5 MHz

3. \*1: The  $V_Z$  value is for the temperature of  $25^\circ\text{C}$ . In other cases, carry out the temperature compensation.

\*2: Guaranteed at 20 ms after power application.

\*3:  $T_j = 25^\circ\text{C to }150^\circ\text{C}$

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

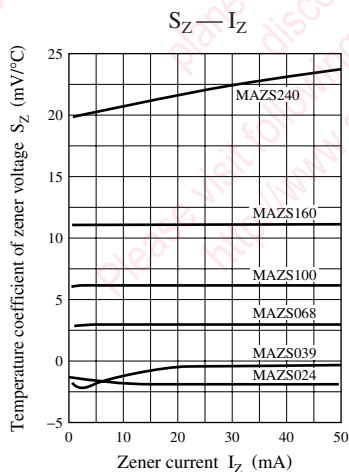
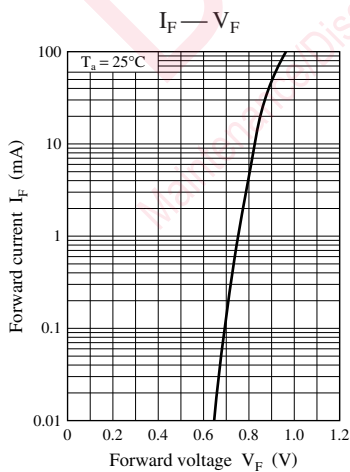
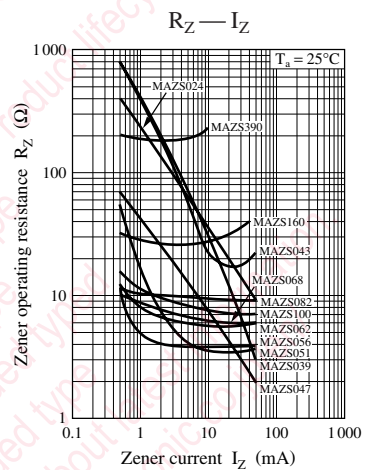
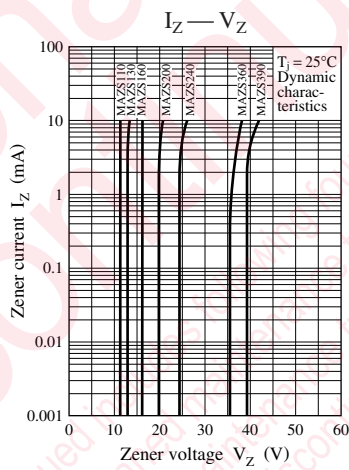
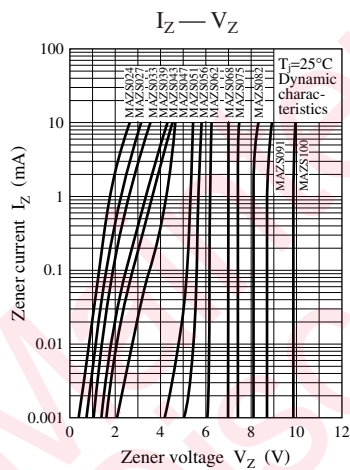
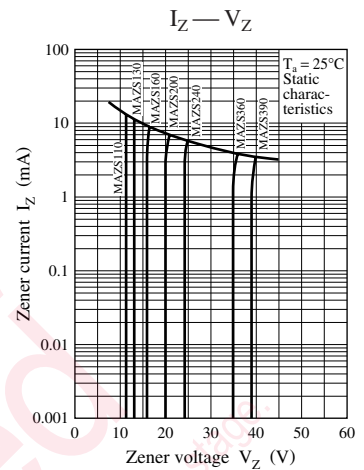
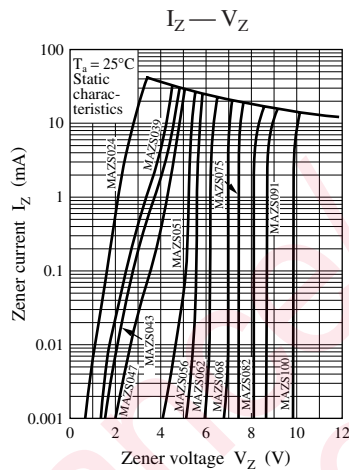
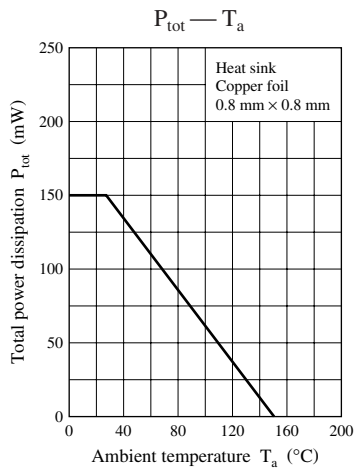
| Part Number | Zener voltage      |      |      |                     | Reverse current     |                    | Zener operating resistance |                     |                     |                     | Temperature coefficient of zener voltage |                     | Marking symbol                                          |
|-------------|--------------------|------|------|---------------------|---------------------|--------------------|----------------------------|---------------------|---------------------|---------------------|------------------------------------------|---------------------|---------------------------------------------------------|
|             | V <sub>Z</sub> (V) |      |      |                     | I <sub>R</sub> (μA) |                    | R <sub>Z</sub> (Ω)         |                     | R <sub>ZK</sub> (Ω) |                     | S <sub>Z</sub> (mV/°C)                   |                     |                                                         |
|             | Min                | Nom  | Max  | I <sub>Z</sub> (mA) | Max                 | V <sub>R</sub> (V) | Max                        | I <sub>Z</sub> (mA) | Max                 | I <sub>Z</sub> (mA) | Typ                                      | I <sub>Z</sub> (mA) |                                                         |
| MAZS024G0L  | 2.28               | 2.40 | 2.60 | 5                   | 120                 | 1.0                | 100                        | 5                   | —                   | —                   | -1.6                                     | 5                   | T                                                       |
| MAZS027G0L  | 2.50               | 2.70 | 2.90 | 5                   | 120                 | 1.0                | 110                        | 5                   | —                   | —                   | -2.0                                     | 5                   | 2 or 2 <sub>-</sub> or 2 <sup>^</sup>                   |
| MAZS027GLL  | 2.50               | 2.60 | 2.75 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 2 <sub>-</sub>                                          |
| MAZS027GHL  | 2.65               | 2.80 | 2.90 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 2 <sup>^</sup>                                          |
| MAZS030G0L  | 2.80               | 3.00 | 3.20 | 5                   | 50                  | 1.0                | 120                        | 5                   | —                   | —                   | -2.1                                     | 5                   | 3 or 3 <sub>-</sub> or 3 <sup>^</sup>                   |
| MAZS030GLL  | 2.80               | 2.90 | 3.05 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 3 <sub>-</sub>                                          |
| MAZS030GHL  | 2.95               | 3.10 | 3.20 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 3 <sup>^</sup>                                          |
| MAZS033G0L  | 3.10               | 3.30 | 3.50 | 5                   | 20                  | 1.0                | 130                        | 5                   | —                   | —                   | -2.4                                     | 5                   | F or F <sub>-</sub> or F <sup>^</sup>                   |
| MAZS033GLL  | 3.10               | 3.20 | 3.35 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | F <sub>-</sub>                                          |
| MAZS033GHL  | 3.25               | 3.40 | 3.50 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | F <sup>^</sup>                                          |
| MAZS036G0L  | 3.40               | 3.60 | 3.80 | 5                   | 10                  | 1.0                | 130                        | 5                   | —                   | —                   | -2.4                                     | 5                   | H or H <sub>-</sub> or H <sup>^</sup>                   |
| MAZS036GLL  | 3.40               | 3.50 | 3.65 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | H <sub>-</sub>                                          |
| MAZS036GHL  | 3.55               | 3.70 | 3.80 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | H <sup>^</sup>                                          |
| MAZS039G0L  | 3.70               | 3.90 | 4.10 | 5                   | 10                  | 1.0                | 130                        | 5                   | —                   | —                   | -2.5                                     | 5                   | K or K <sub>-</sub> or K <sup>^</sup>                   |
| MAZS039GLL  | 3.70               | 3.80 | 3.97 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | K <sub>-</sub>                                          |
| MAZS039GHL  | 3.87               | 4.00 | 4.10 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | K <sup>^</sup>                                          |
| MAZS043G0L  | 4.00               | 4.30 | 4.60 | 5                   | 10                  | 1.0                | 130                        | 5                   | —                   | —                   | -2.5                                     | 5                   | L or L <sub>-</sub> or L <sub>-</sub> or L <sup>^</sup> |
| MAZS043GLL  | 4.03               | 4.10 | 4.26 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | L <sub>-</sub>                                          |
| MAZS043GML  | 4.17               | 4.30 | 4.40 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | L <sub>-</sub>                                          |
| MAZS043GHL  | 4.31               | 4.40 | 4.54 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | L <sup>^</sup>                                          |
| MAZS047G0L  | 4.40               | 4.70 | 5.00 | 5                   | 2.0                 | 1.0                | 80                         | 5                   | 800                 | 1.0                 | -1.4                                     | 5                   | N or N <sub>-</sub> or N <sub>-</sub> or N <sup>^</sup> |
| MAZS047GLL  | 4.45               | 4.60 | 4.69 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | N <sub>-</sub>                                          |
| MAZS047GML  | 4.59               | 4.70 | 4.83 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | N <sub>-</sub>                                          |
| MAZS047GHL  | 4.74               | 4.90 | 4.99 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | N <sup>^</sup>                                          |
| MAZS051G0L  | 4.80               | 5.10 | 5.40 | 5                   | 1.0                 | 2.0                | 60                         | 5                   | 500                 | 1.0                 | -0.8                                     | 5                   | 5 or 5 <sub>-</sub> or 5 <sub>-</sub> or 5 <sup>^</sup> |
| MAZS051GLL  | 4.87               | 5.00 | 5.12 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 5 <sub>-</sub>                                          |
| MAZS051GML  | 5.00               | 5.10 | 5.26 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 5 <sub>-</sub>                                          |
| MAZS051GHL  | 5.14               | 5.30 | 5.40 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 5 <sup>^</sup>                                          |
| MAZS056G0L  | 5.30               | 5.60 | 6.00 | 5                   | 0.5                 | 2.5                | 40                         | 5                   | 200                 | 0.5                 | 1.2                                      | 5                   | P or P <sub>-</sub> or P <sub>-</sub> or P <sup>^</sup> |
| MAZS056GLL  | 5.30               | 5.40 | 5.58 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | P <sub>-</sub>                                          |
| MAZS056GML  | 5.48               | 5.60 | 5.76 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | P <sub>-</sub>                                          |
| MAZS056GHL  | 5.66               | 5.80 | 5.95 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | P <sup>^</sup>                                          |
| MAZS062G0L  | 5.80               | 6.20 | 6.60 | 5                   | 0.2                 | 4.0                | 30                         | 5                   | 100                 | 0.5                 | 2.3                                      | 5                   | 6 or 6 <sub>-</sub> or 6 <sub>-</sub> or 6 <sup>^</sup> |
| MAZS062GLL  | 5.85               | 6.00 | 6.15 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 6 <sub>-</sub>                                          |
| MAZS062GML  | 6.05               | 6.20 | 6.36 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 6 <sub>-</sub>                                          |
| MAZS062GHL  | 6.24               | 6.40 | 6.56 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 6 <sup>^</sup>                                          |
| MAZS068G0L  | 6.40               | 6.80 | 7.20 | 5                   | 0.1                 | 4.0                | 20                         | 5                   | 60                  | 0.5                 | 3.0                                      | 5                   | R or R <sub>-</sub> or R <sub>-</sub> or R <sup>^</sup> |
| MAZS068GLL  | 6.44               | 6.60 | 6.77 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | R <sub>-</sub>                                          |
| MAZS068GML  | 6.64               | 6.80 | 6.98 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | R <sub>-</sub>                                          |
| MAZS068GHL  | 6.85               | 7.00 | 7.20 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | R <sup>^</sup>                                          |
| MAZS075G0L  | 7.00               | 7.50 | 7.90 | 5                   | 0.1                 | 5.0                | 20                         | 5                   | 60                  | 0.5                 | 4.0                                      | 5                   | 7 or 7 <sub>-</sub> or 7 <sub>-</sub> or 7 <sup>^</sup> |
| MAZS075GLL  | 7.07               | 7.30 | 7.43 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 7 <sub>-</sub>                                          |
| MAZS075GML  | 7.29               | 7.50 | 7.67 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 7 <sub>-</sub>                                          |
| MAZS075GHL  | 7.51               | 7.70 | 7.89 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 7 <sup>^</sup>                                          |
| MAZS082G0L  | 7.70               | 8.20 | 8.70 | 5                   | 0.1                 | 5.0                | 20                         | 5                   | 60                  | 0.5                 | 4.6                                      | 5                   | 8 or 8 <sub>-</sub> or 8 <sub>-</sub> or 8 <sup>^</sup> |
| MAZS082GLL  | 7.77               | 7.90 | 8.17 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 8 <sub>-</sub>                                          |
| MAZS082GML  | 8.03               | 8.20 | 8.43 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 8 <sub>-</sub>                                          |
| MAZS082GHL  | 8.29               | 8.50 | 8.70 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 8 <sup>^</sup>                                          |
| MAZS091G0L  | 8.50               | 9.10 | 9.60 | 5                   | 0.1                 | 6.0                | 20                         | 5                   | 60                  | 0.5                 | 5.5                                      | 5                   | 9 or 9 <sub>-</sub> or 9 <sub>-</sub> or 9 <sup>^</sup> |
| MAZS091GLL  | 8.58               | 8.80 | 9.02 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 9 <sub>-</sub>                                          |
| MAZS091GML  | 8.87               | 9.10 | 9.33 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 9 <sub>-</sub>                                          |
| MAZS091GHL  | 9.14               | 9.40 | 9.60 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 9 <sup>^</sup>                                          |

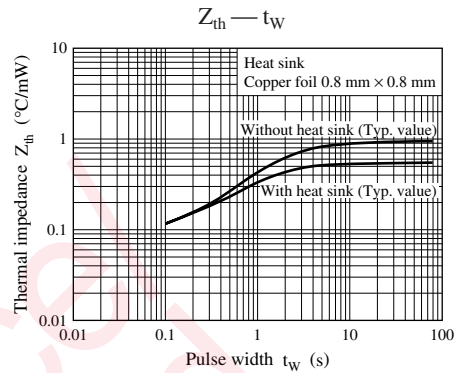
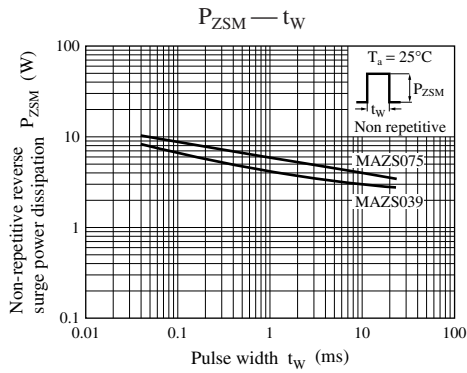
■ Electrical characteristics within part numbers (continued)  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$ 

| Part Number | Zener voltage      |       |       |                     | Reverse current     |                    | Zener operating resistance |                     |                     |                     | Temperature coefficient of zener voltage |                     | Marking symbol          |
|-------------|--------------------|-------|-------|---------------------|---------------------|--------------------|----------------------------|---------------------|---------------------|---------------------|------------------------------------------|---------------------|-------------------------|
|             | V <sub>Z</sub> (V) |       |       | I <sub>Z</sub> (mA) | I <sub>R</sub> (μA) |                    | R <sub>Z</sub> (Ω)         |                     | R <sub>ZK</sub> (Ω) |                     | S <sub>Z</sub> (mV/°C)                   |                     |                         |
|             | Min                | Nom   | Max   |                     | Max                 | V <sub>R</sub> (V) | Max                        | I <sub>Z</sub> (mA) | Max                 | I <sub>Z</sub> (mA) | Typ                                      | I <sub>Z</sub> (mA) |                         |
| MAZS100G0L  | 9.40               | 10.00 | 10.60 | 5                   | 0.05                | 7.0                | 30                         | 5                   | 60                  | 0.5                 | 6.4                                      | 5                   | 10 or 10_ or 10- or 10^ |
| MAZS100GLL  | 9.44               | 9.70  | 9.92  |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 10_                     |
| MAZS100GML  | 9.75               | 10.00 | 10.25 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 10-                     |
| MAZS100GHL  | 10.07              | 10.30 | 10.59 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 10^                     |
| MAZS110G0L  | 10.40              | 11.00 | 11.60 | 5                   | 0.05                | 8.0                | 30                         | 5                   | 60                  | 0.5                 | 7.4                                      | 5                   | 11 or 11_ or 11- or 11^ |
| MAZS110GLL  | 10.40              | 10.70 | 10.94 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 11_                     |
| MAZS110GML  | 10.73              | 11.00 | 11.28 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 11-                     |
| MAZS110GHL  | 11.05              | 11.30 | 11.60 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 11^                     |
| MAZS120G0L  | 11.40              | 12.00 | 12.70 | 5                   | 0.05                | 9.0                | 30                         | 5                   | 80                  | 0.5                 | 8.4                                      | 5                   | 12 or 12_ or 12- or 12^ |
| MAZS120GLL  | 11.40              | 11.70 | 11.96 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 12_                     |
| MAZS120GML  | 11.73              | 12.00 | 12.33 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 12-                     |
| MAZS120GHL  | 12.06              | 12.30 | 12.68 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 12^                     |
| MAZS130G0L  | 12.40              | 13.00 | 14.10 | 5                   | 0.05                | 10.0               | 35                         | 5                   | 80                  | 0.5                 | 9.4                                      | 5                   | 13 or 13_ or 13- or 13^ |
| MAZS130GLL  | 12.40              | 12.70 | 12.99 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 13_                     |
| MAZS130GML  | 12.73              | 13.00 | 13.40 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 13-                     |
| MAZS130GHL  | 13.25              | 13.70 | 14.08 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 13^                     |
| MAZS150G0L  | 13.90              | 15.00 | 15.60 | 5                   | 0.05                | 11.0               | 40                         | 5                   | 80                  | 0.5                 | 11.4                                     | 5                   | 15 or 15_ or 15- or 15^ |
| MAZS150GLL  | 13.90              | 14.30 | 14.76 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 15_                     |
| MAZS150GML  | 14.60              | 15.00 | 15.35 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 15-                     |
| MAZS150GHL  | 14.95              | 15.30 | 15.60 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 15^                     |
| MAZS160G0L  | 15.30              | 16.00 | 17.10 | 5                   | 0.05                | 12.0               | 50                         | 5                   | 80                  | 0.5                 | 12.4                                     | 5                   | 16 or 16_ or 16- or 16^ |
| MAZS160GLL  | 15.30              | 15.70 | 16.09 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 16_                     |
| MAZS160GML  | 15.70              | 16.00 | 16.50 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 16-                     |
| MAZS160GHL  | 16.26              | 16.70 | 17.10 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 16^                     |
| MAZS180G0L  | 16.90              | 18.00 | 19.10 | 5                   | 0.05                | 13.0               | 60                         | 5                   | 80                  | 0.5                 | 14.4                                     | 5                   | 18 or 18_ or 18- or 18^ |
| MAZS180GLL  | 16.90              | 17.30 | 17.76 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 18_                     |
| MAZS180GML  | 17.55              | 18.00 | 18.45 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 18-                     |
| MAZS180GHL  | 18.20              | 18.70 | 19.10 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 18^                     |
| MAZS200G0L  | 18.80              | 20.00 | 21.20 | 5                   | 0.05                | 15.0               | 80                         | 5                   | 100                 | 0.5                 | 16.4                                     | 5                   | 20 or 20_ or 20- or 20^ |
| MAZS200GLL  | 18.85              | 19.30 | 19.81 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 20_                     |
| MAZS200GML  | 19.50              | 20.00 | 20.50 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 20-                     |
| MAZS200GHL  | 20.15              | 20.70 | 21.19 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 20^                     |
| MAZS220G0L  | 20.80              | 22.00 | 23.30 | 5                   | 0.05                | 17.0               | 80                         | 5                   | 100                 | 0.5                 | 18.4                                     | 5                   | 22 or 22_ or 22- or 22^ |
| MAZS220GLL  | 20.80              | 21.30 | 21.86 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 22_                     |
| MAZS220GML  | 21.45              | 22.00 | 22.55 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 22-                     |
| MAZS220GHL  | 22.10              | 22.70 | 23.24 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 22^                     |
| MAZS240G0L  | 22.80              | 24.00 | 25.60 | 5                   | 0.05                | 19.0               | 100                        | 5                   | 120                 | 0.5                 | 20.4                                     | 5                   | 24 or 24_ or 24- or 24^ |
| MAZS240GLL  | 22.80              | 23.30 | 23.97 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 24_                     |
| MAZS240GML  | 23.50              | 24.00 | 24.70 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 24-                     |
| MAZS240GHL  | 24.35              | 25.00 | 25.60 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 24^                     |
| MAZS270G0L  | 25.10              | 27.00 | 28.90 | 2                   | 0.05                | 21.0               | 120                        | 2                   | 120                 | 0.5                 | 23.4                                     | 2                   | 27 or 27_ or 27- or 27^ |
| MAZS270GLL  | 25.30              | 26.00 | 26.70 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 27_                     |
| MAZS270GML  | 26.30              | 27.00 | 27.70 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 27-                     |
| MAZS270GHL  | 27.30              | 28.00 | 28.70 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 27^                     |
| MAZS300G0L  | 28.00              | 30.00 | 32.00 | 2                   | 0.05                | 23.0               | 160                        | 2                   | 160                 | 0.5                 | 26.6                                     | 2                   | 30 or 30_ or 30- or 30^ |
| MAZS300GLL  | 28.30              | 29.00 | 29.70 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 30_                     |
| MAZS300GML  | 29.30              | 30.00 | 30.80 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 30-                     |
| MAZS300GHL  | 30.20              | 31.00 | 31.80 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 30^                     |
| MAZS330G0L  | 31.00              | 33.00 | 35.00 | 2                   | 0.05                | 25.0               | 200                        | 2                   | 200                 | 0.5                 | 29.7                                     | 2                   | 33 or 33_ or 33- or 33^ |
| MAZS330GLL  | 31.20              | 32.00 | 32.80 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 33_                     |
| MAZS330GML  | 32.20              | 33.00 | 33.80 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 33-                     |
| MAZS330GHL  | 33.20              | 34.00 | 34.90 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 33^                     |

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

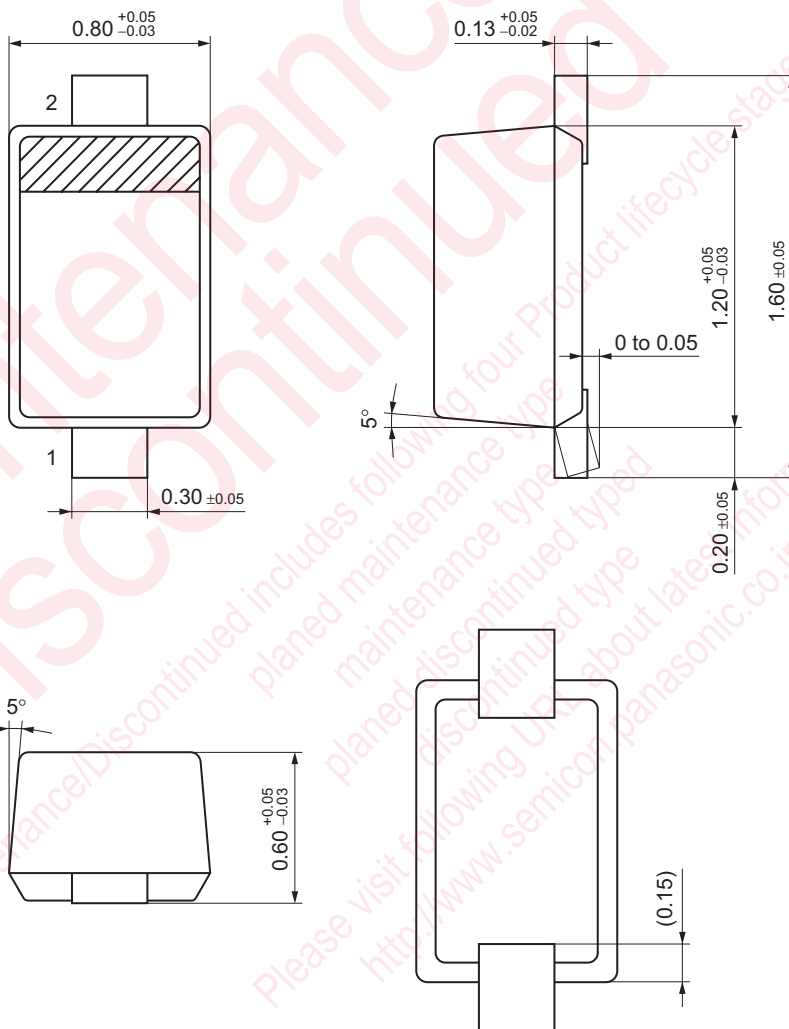
| Part Number | Zener voltage      |       |       |                     | Reverse current     |                    | Zener operating resistance |                     |                     |                     | Temperature coefficient of zener voltage |                     | Marking symbol          |
|-------------|--------------------|-------|-------|---------------------|---------------------|--------------------|----------------------------|---------------------|---------------------|---------------------|------------------------------------------|---------------------|-------------------------|
|             | V <sub>Z</sub> (V) |       |       |                     | I <sub>R</sub> (μA) |                    | R <sub>Z</sub> (Ω)         |                     | R <sub>ZK</sub> (Ω) |                     | S <sub>Z</sub> (mV/°C)                   |                     |                         |
|             | Min                | Nom   | Max   | I <sub>Z</sub> (mA) | Max                 | V <sub>R</sub> (V) | Max                        | I <sub>Z</sub> (mA) | Max                 | I <sub>Z</sub> (mA) | Typ                                      | I <sub>Z</sub> (mA) |                         |
| MAZS360G0L  | 34.00              | 36.00 | 38.00 | 2                   | 0.05                | 27.0               | 250                        | 2                   | 250                 | 0.5                 | 33.0                                     | 2                   | 36 or 36_ or 36— or 36^ |
| MAZS360GLL  | 34.10              | 35.00 | 35.90 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 36_                     |
| MAZS360GML  | 35.10              | 36.00 | 36.90 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 36—                     |
| MAZS360GHL  | 36.10              | 37.00 | 37.90 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 36^                     |
| MAZS390G0L  | 37.00              | 39.00 | 41.00 | 2                   | 0.05                | 30.0               | 300                        | 2                   | 300                 | 0.5                 | 35.6                                     | 2                   | 39 or 39_ or 39— or 39^ |
| MAZS390GLL  | 37.10              | 38.00 | 39.00 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 39_                     |
| MAZS390GML  | 38.00              | 39.00 | 40.00 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 39—                     |
| MAZS390GHL  | 39.00              | 40.00 | 41.00 |                     |                     |                    |                            |                     |                     |                     |                                          |                     | 39^                     |





# SSMini2-F4

Unit: mm



## utions in using the technical information and scribed in this book

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ly to show the main characteristics and application circuit examples  
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standard applications or general electronic equipment (such as office  
and household appliances).

ng applications:

biles, traffic control equipment, combustion equipment, life support  
reliability are required, or if the failure or malfunction of the prod-

k are subject to change without notice for modification and/or im-  
use of the products, therefore, ask for the most up-to-date Product  
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bsolute maximum rating and the guaranteed operating conditions  
(.). Especially, please be careful not to exceed the range of absolute  
er-off and mode-switching. Otherwise, we will not be liable for any

take into the consideration of incidence of break down and failure  
n the systems such as redundant design, arresting the spread of fire  
al injury, fire, social damages, for example, by using the products.

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mounting or at customer's process. When using products for which  
shelf life and the elapsed time since first opening the packages.

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