# **MAZZ000H Series**

## Silicon planar type

For surge absorption circuit

#### Features

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

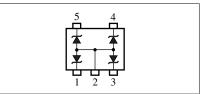
Unit: mm
$\begin{array}{c} 2.0\pm0.1 \\ \hline (0.65) & (0.65) \\ \hline 5 & 4 \\ \hline 1 & 2 & 3 \\ \hline 1 & 2 & 3 \\ \hline 0.2\pm0.05 \end{array} \qquad $
1: Cathode 1 3: Cathode 2 2: Anode 1, 2 4: Cathode 3 Anode 3, 4 5: Cathode 4 SMini5-F1 Package

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

Parameter	Symbol	Rating	Unit
Total power dissipation*	P <sub>tot</sub>	200	mW
Junction temperature	Tj	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

Note) \*: With a printed circuit board (Four elements in total)

#### 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 —	Refer to the list of the electrical characteristic within part numbers				V
Zener knee operating resistance	R <sub>ZK</sub>	IZ	Specified value					Ω
Zener operating resistance	R <sub>Z</sub>	IZ	Specified value					Ω
Reverse current	I <sub>R</sub>	V <sub>R</sub>	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  $\Omega$ , 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.

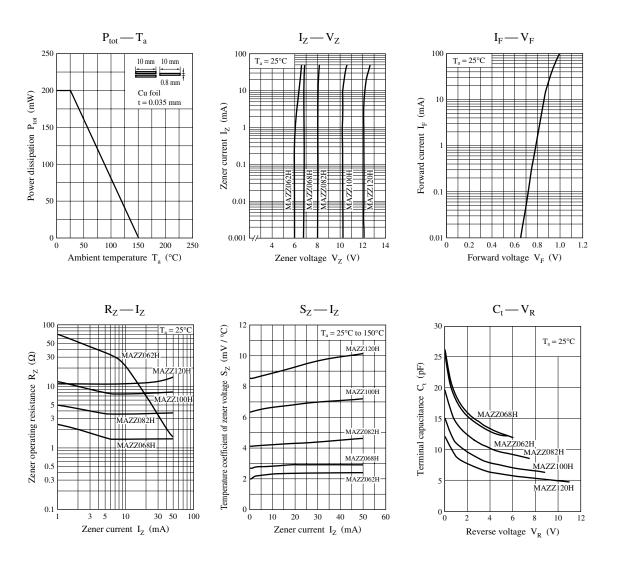
\*2: Guaranteed at 20 ms after power application.

Electrical characteristics within part numbers $T_a = 25$ C										
	Zener voltage			Reverse current		Zener operating resistance				
Part number	V <sub>Z</sub> (V)				I <sub>R</sub> (μA) V <sub>B</sub>		$R_Z(\Omega)$	$R_{ZK}(\Omega)$ $I_7 = 0.5 \text{ mA}$	Marking symbol	
	Min	Nom	Max	(mA)	Max	(V)	Max	Max		
MAZZ062H	5.8	6.2	6.6	5	0.2	4	50	100	6.2Z	
MAZZ068H	6.4	6.8	7.2	5	0.1	4	30	60	6.8Z	
MAZZ082H	7.7	8.2	8.7	5	0.1	5	30	60	8.2Z	
MAZZ100H	9.4	10.0	10.6	5	0.05	7	30	60	10Z	
MAZZ120H	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<sub>Z</sub> 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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