

# MAZL000H Series

## Silicon planar type

For surge absorption circuit

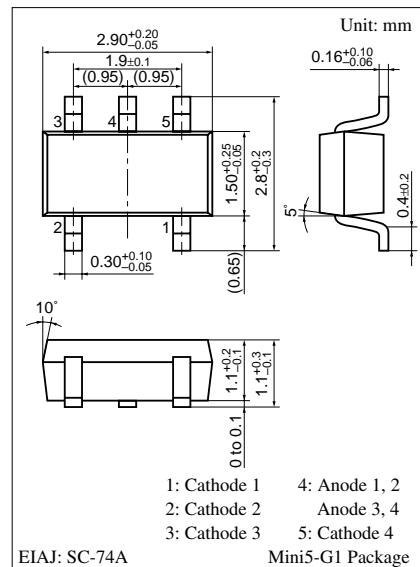
### ■ Features

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

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

Parameter	Symbol	Rating	Unit
Total power dissipation *	$P_{tot}$	200	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
Zener voltage*2	$V_Z$	$I_Z$ Specified value				V
Zener knee 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				$\mu\text{A}$

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

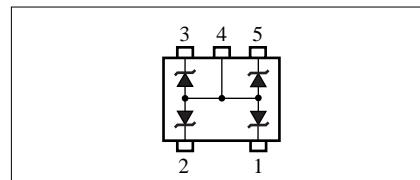
2. Electrostatic breakdown voltage is  $\pm 10$  kV

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  $25^\circ\text{C}$ . In other cases, carry out the temperature compensation.

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

### Internal Connection

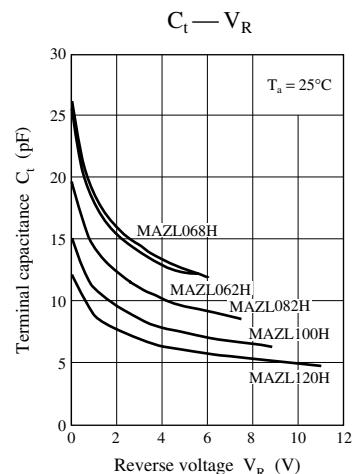
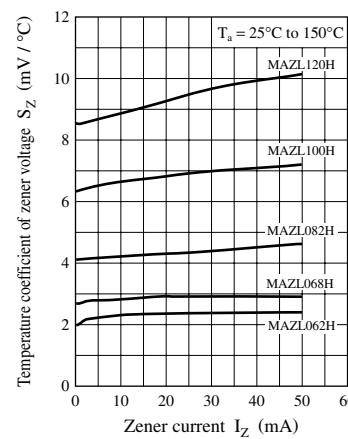
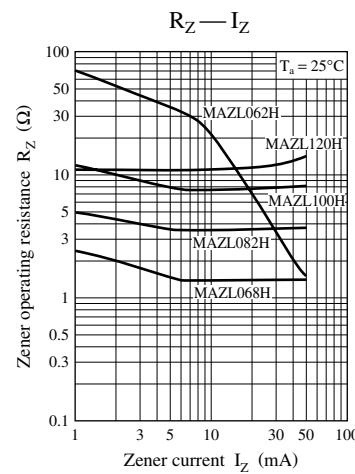
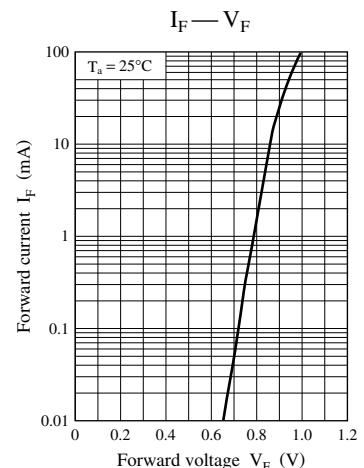
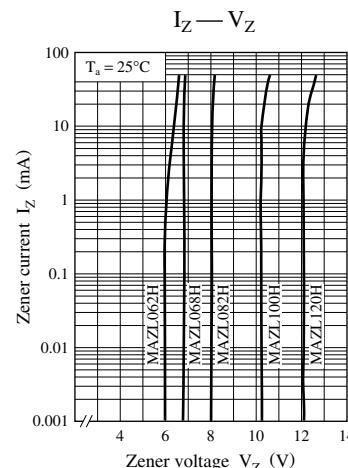
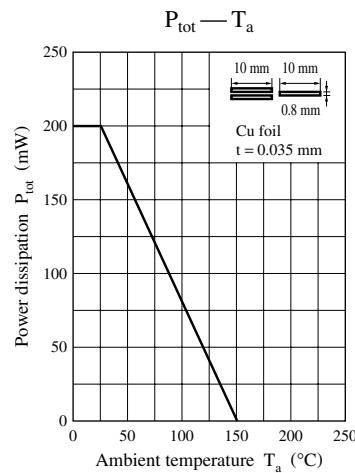


■ Electrical characteristics within part numbers  $T_a = 25^\circ\text{C}$ 

Part number	Zener voltage				Reverse current		Zener operating resistance		Marking symbol
	V <sub>Z</sub> (V)			I <sub>Z</sub> (mA)	I <sub>R</sub> (mA)	V <sub>R</sub> (V)	R <sub>Z</sub> ( $\Omega$ )	R <sub>ZK</sub> ( $\Omega$ )	
	Min	Nom	Max				I <sub>Z</sub> = 5 mA Max	I <sub>Z</sub> = 0.5 mA 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

Note) 1. The V<sub>Z</sub> value is the one after power application for 20 ms at  $T_a = 25^\circ\text{C}$ .

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



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