

# MAZT000H Series

## Silicon planar type

For surge absorption circuit

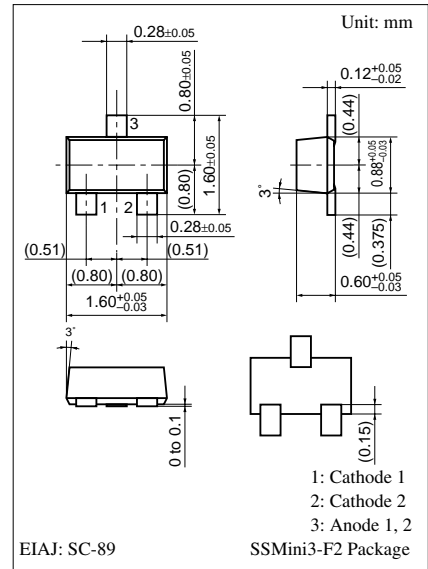
### ■ Features

- Two elements anode-common type
- $P_{tot} = 150 \text{ mW}$

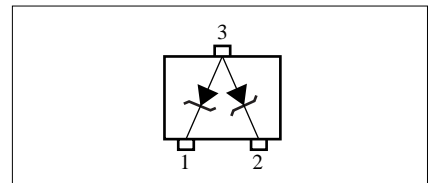
### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
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



### Internal Connection



### ■ 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				$\mu\text{A}$

Refer to the list of the electrical characteristics within part numbers

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)

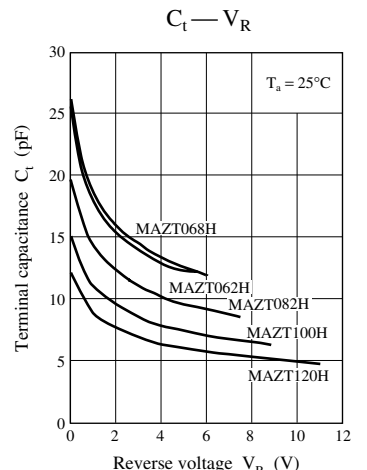
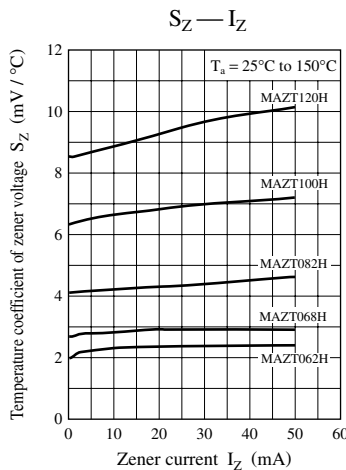
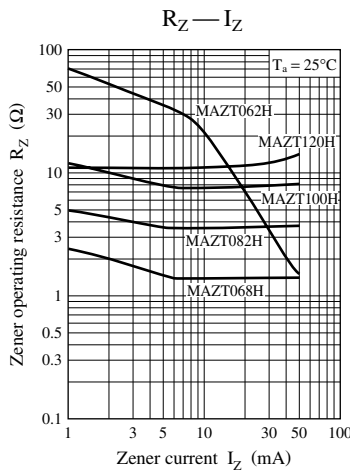
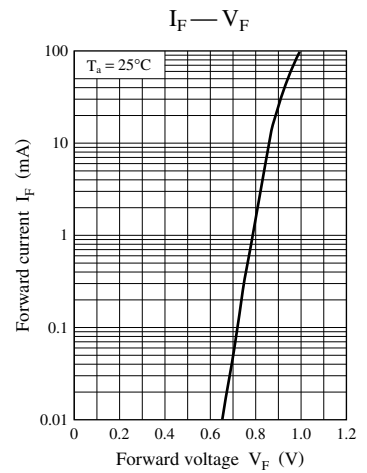
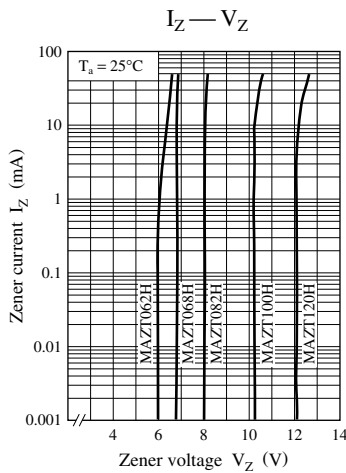
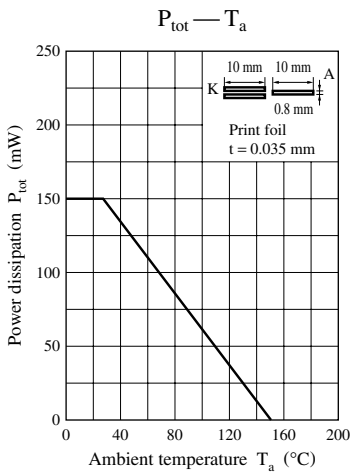
3. \*1: The  $V_Z$  value is for the temperature of  $25^\circ\text{C}$ . In other cases, carry out the temperature compensation.

\*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		Zener operating resistance		Marking symbol
	$V_Z$ (V)				$I_R$ ( $\mu\text{A}$ )		$R_Z$ ( $\Omega$ )	$R_{ZK}$ ( $\Omega$ )	
	Min	Nom	Max	$I_Z$ (mA)	Max	$V_R$ (V)	$I_Z = 5\text{ mA}$ Max	$I_Z = 0.5\text{ mA}$ Max	
MAZT062H	5.8	6.2	6.6	5	0.2	4	50	100	6.2Z
MAZT068H	6.4	6.8	7.2	5	0.1	4	30	60	6.8Z
MAZT082H	7.7	8.2	8.7	5	0.1	5	30	60	8.2Z
MAZT100H	9.4	10.0	10.6	5	0.05	7	30	60	10Z
MAZT120H	11.4	12.0	12.7	5	0.05	9	30	80	12Z

Note) 1. The  $V_Z$  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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