# **MAZW000H Series**

## Silicon planar type

For surge absorption circuit

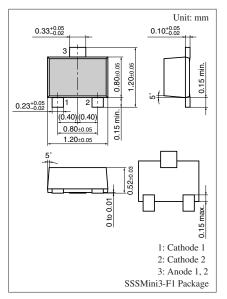
#### ■ Features

- Two elements anode-common type
- SSS-Mini type 3-pin package

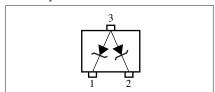
### ■ Absolute Maximum Ratings T<sub>a</sub> = 25°C

Parameter	Symbol	Rating	Unit	
Total power dissipation *	P <sub>tot</sub>	150	mW	
Junction temperature	$T_{j}$	150	°C	
Storage temperature	$T_{stg}$	-55 to +150	°C	

Note) \*: P<sub>tot</sub> = 150 mW achieved with a printed circuit board.



#### Internally connected circuit



### ■ Common Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

Parameter	Symbol		Conditions	N	⁄lin	Тур	Max	Unit
Zener voltage *	Vz	$I_Z$	Specified value —					V
Zener rise operating resistance	R <sub>ZK</sub>	$I_Z$	Specified value	Refer to the list of the electrical characteristics — within part numbers				Ω
Zener operating resistance	R <sub>Z</sub>	$I_Z$	Specified value				-3	Ω
Reverse current	$I_R$	V <sub>R</sub>	Specified value					μΑ

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

2. Electrostatic breakdown voltage is ±10 kV

Test method: IEC1000-4-2 (C = 150 pF, R = 330  $\Omega$ , Contact discharge: 10 times)

3. \*: The temperature must be controlled 25°C for V<sub>Z</sub> mesurement.

 $V_Z$  value measured at other temperature must be adjusted to  $V_Z$  (25°C)

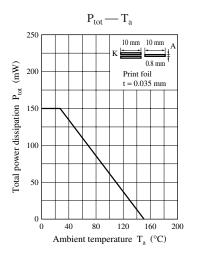
 $\ensuremath{V_{Z}}$  guaranted 20 ms after current flow.

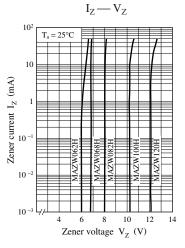
## ■ Electrical characteristics within part numbers $T_a = 25^{\circ}C \pm 3^{\circ}C$

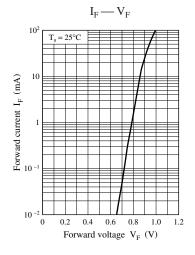
	Zener voltage  V <sub>Z</sub> (V)			Reverse current (DC)		Zener operating resistance $R_Z(\Omega) R_{ZK}(\Omega)$ $I_z = 5 \text{ mA}$ $I_z = 0.5 \text{ mA}$		Marking symbol	
Part number				I <sub>R</sub> (μA)					
	Min	Nom	Max	(mA)	Max	V <sub>R</sub> (V)	Max	Max	
MAZW062H	5.8	6.2	6.6	5	0.2	4	50	100	62
MAZW068H	6.4	6.8	7.2	5	0.1	4	30	60	68
MAZW082H	7.7	8.2	8.7	5	0.1	5	30	60	82
MAZW100H	9.4	10.0	10.6	5	0.05	7	30	60	10
MAZW120H	11.4	12.0	12.7	5	0.05	9	30	60	12

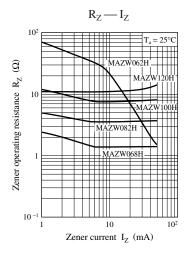
Note) 1. The  $V_Z$  value is the one after power application for 20 ms at  $T_a = 25$ °C.

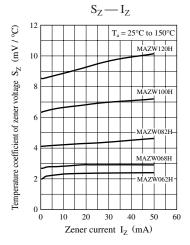
2. The zener voltage temperature coefficient is the one for  $T_i = 25$ °C to 150°C.

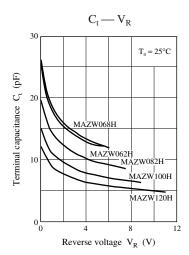












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