

# MAZW000H Series

## Silicon planar type

For surge absorption circuit

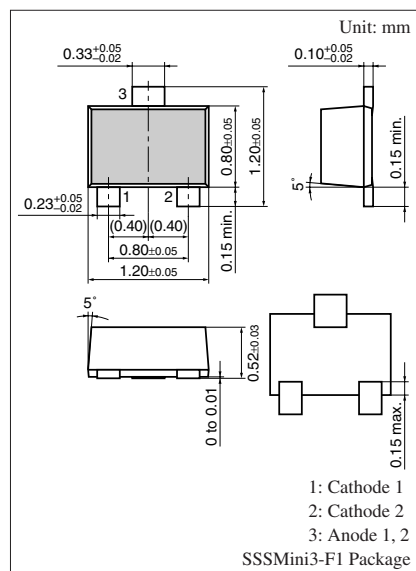
### ■ Features

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

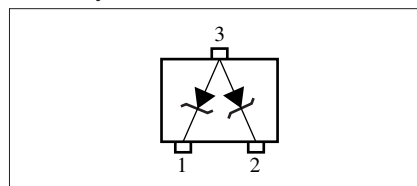
### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Total power dissipation *	$P_{\text{tot}}$	150	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$

Note) \*:  $P_{\text{tot}} = 150 \text{ mW}$  achieved with a printed circuit board.



Internally connected circuit



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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Zener voltage *	$V_Z$	$I_Z$ Specified value				V
Zener rise 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. Measuring methods are based JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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. \*: The temperature must be controlled  $25^\circ\text{C}$  for  $V_Z$  measurement.

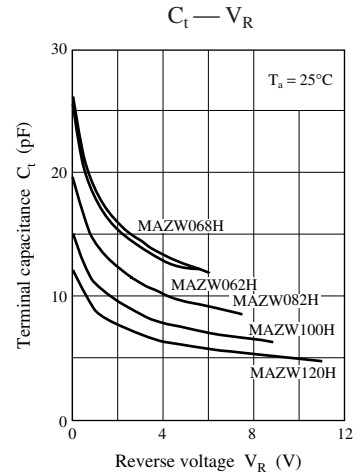
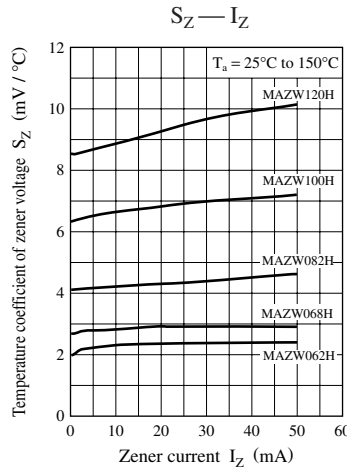
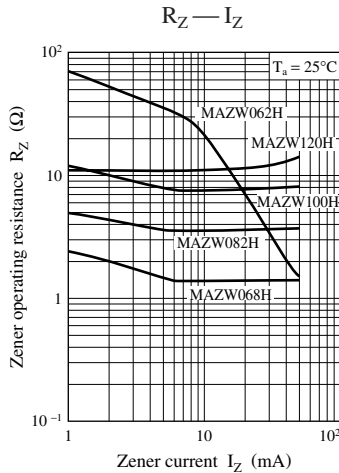
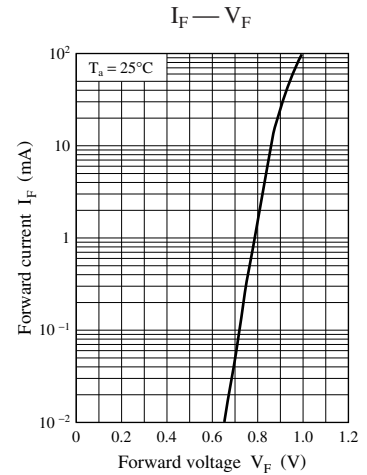
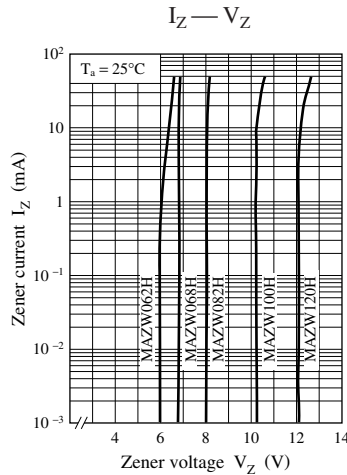
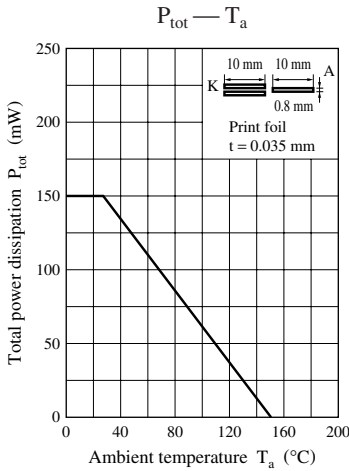
$V_Z$  value measured at other temperature must be adjusted to  $V_Z (25^\circ\text{C})$

$V_Z$  guaranteed 20 ms after current flow.

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

Part number	Zener voltage				Reverse current (DC)		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	
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  $T_a = 25^\circ\text{C}$ .  
 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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