

MAZ9000H Series

Silicon planar type

For surge absorption circuit

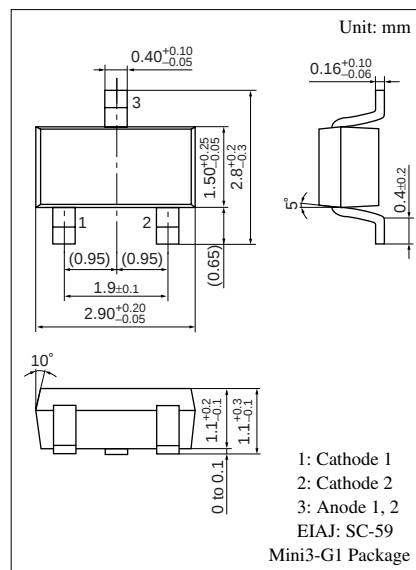
■ Features

- Mini type 3-pin package (Mini3-G1)
- Two elements anode-common type
- $P_{\text{tot}} = 200 \text{ mW}$

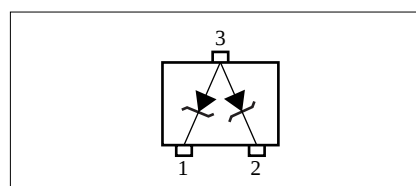
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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



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				Ω
Zener operating resistance	R_Z	I_Z Specified value				Ω
Reverse current	I_R	V_R Specified value				μA

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

2. Electrostatic breakdown voltage is $\pm 10 \text{ kV}$

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

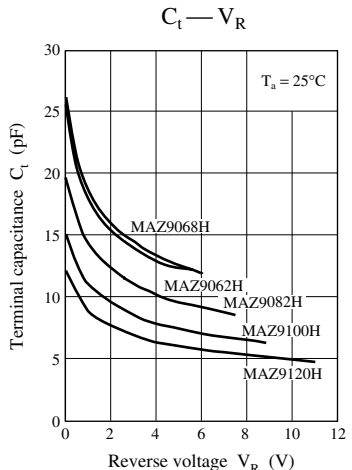
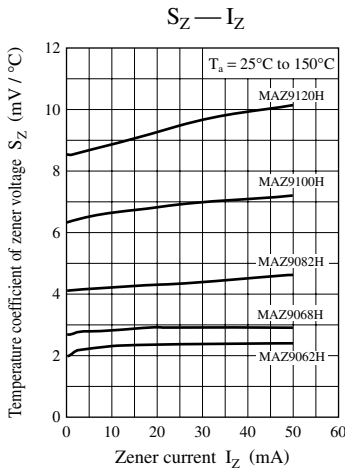
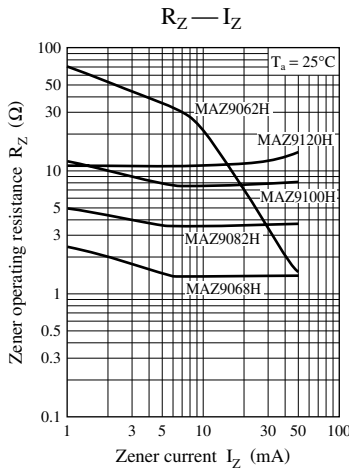
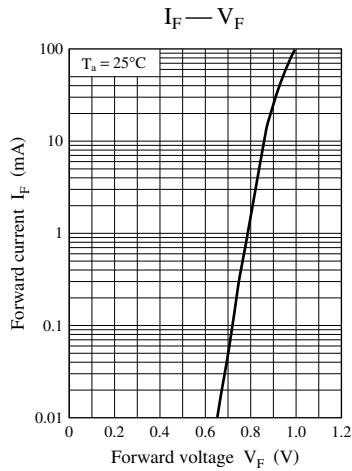
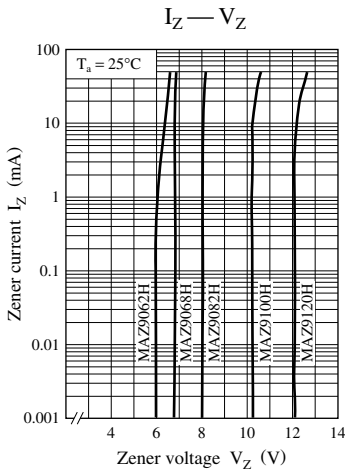
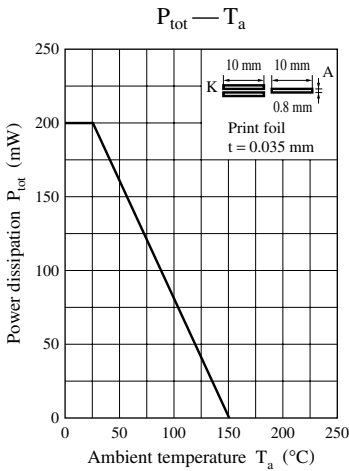
3. *1: The V_Z value is for the temperature of 25°C . In other cases, carry out the temperature compensation.

*2: Guaranteed at 20 ms after power application.

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

Part number	Zener voltage				Reverse current		Zener operating resistance		Marking symbol
	V_Z (V)				I_R (μA)		R_Z (Ω)	R_{ZK} (Ω)	
	Min	Nom	Max	I_Z (mA)	Max	V_R (V)	$I_Z = 5\text{ mA}$ Max	$I_Z = 0.5\text{ mA}$ Max	
MAZ9062H	5.8	6.2	6.6	5	0.2	4	50	100	6.2Z
MAZ9068H	6.4	6.8	7.2	5	0.1	4	30	60	6.8Z
MAZ9082H	7.7	8.2	8.7	5	0.1	5	30	60	8.2Z
MAZ9100H	9.4	10.0	10.6	5	0.05	7	30	60	10Z
MAZ9120H	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°C .



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