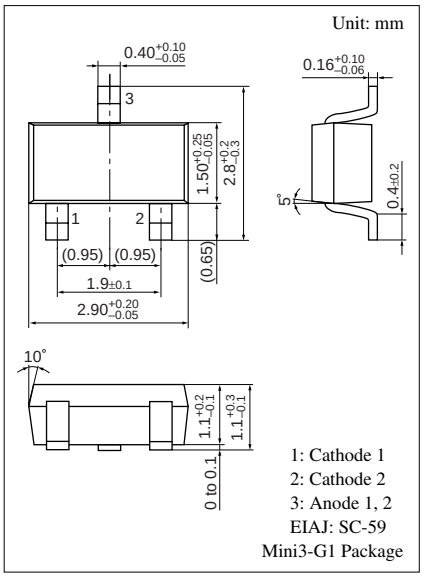
MAZ9000H Series

Silicon planar type

For surge absorption circuit

■ Features

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

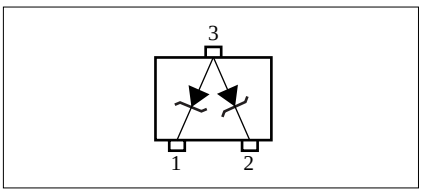


■ Absolute Maximum Ratings T_a = 25°C

Parameter	Symbol	Rating	Unit
Total power dissipation *	P_{tot}	200	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

Note) ∗: With a printed circuit board

Internal Connection



■ Common Electrical Characteristics T_a = 25°C *1

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Zener voltage*2	V_Z	I_Z Specified value	Refer to the list of the electrical characteristics within part numbers			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

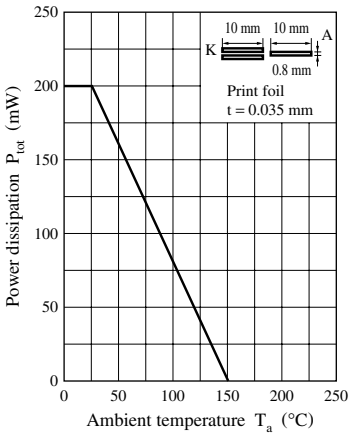
2. Electrostatic breakdown voltage is ±10 kV
   Test method: IEC1000-4-2 (C = 150 pF, R = 330 Ω, Contact discharge: 10 times)
3. ∗1: The V_Z value is for the temperature of 25°C. In other cases, carry out the temperature compensation.
   ∗2: Guaranteed at 20 ms after power application.

■ Electrical characteristics within part numbers $T_a = 25°C$

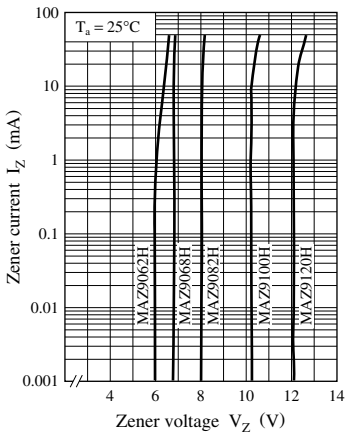
Part number	Zener voltage				Reverse current		Zener operating resistance		Marking symbol
	V_Z (V)			I_Z (mA)	I_R (μA)	V_R (V)	R_Z (Ω) I_Z = 5 mA	R_{ZK} (Ω) I_Z = 0.5 mA	
	Min	Nom	Max		Max		Max	Max	
MAZ9062H	5.8	6.2	6.6	5	0.2	4	50	100	6.2Z
MAZ9068H	6.4	6.8	7.2	5	0.1	4	30	60	6.8Z
MAZ9082H	7.7	8.2	8.7	5	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 $T_a = 25°C$.
2. The zener voltage temperature coefficient is the one for $T_j = 25°C$ to $150°C$.

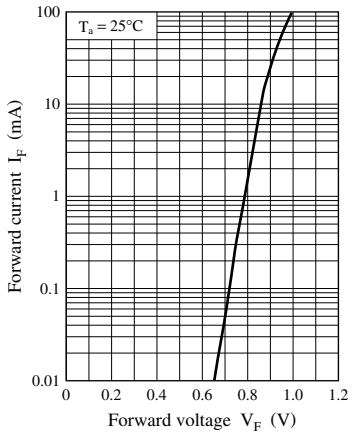
$P_{tot} — T_a$



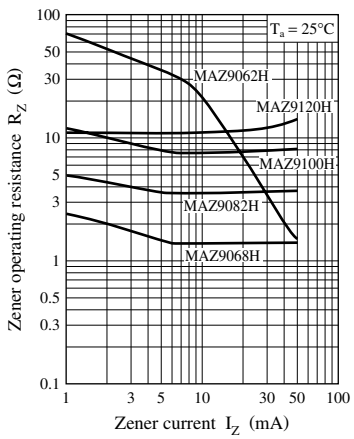
$I_Z — V_Z$



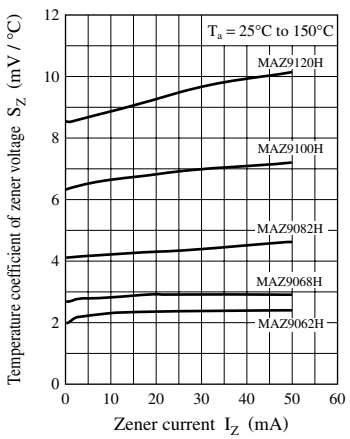
$I_F — V_F$



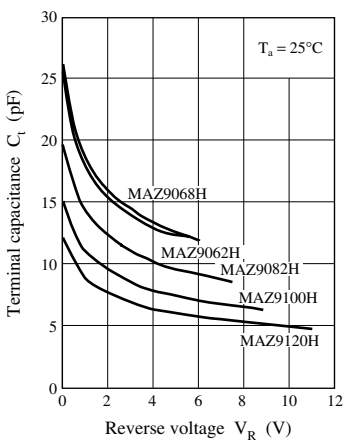
$R_Z — I_Z$



$S_Z — I_Z$



$C_t — V_R$



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