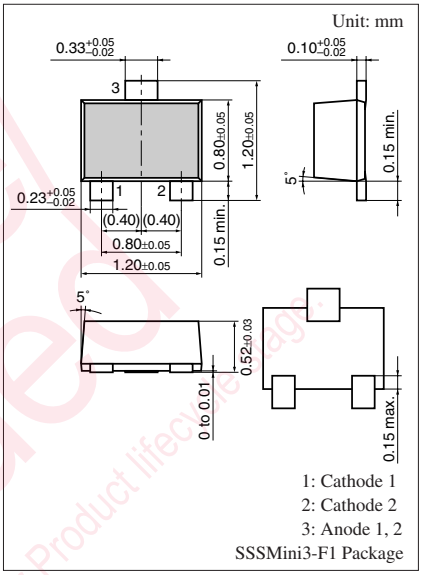
MAZW000H Series

Silicon planar type

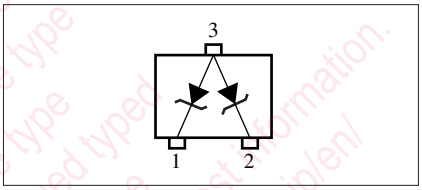
For surge absorption circuit

■ Features

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



Internally connected circuit



■ Absolute Maximum Ratings $T_a = 25°C$

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

Note) ∗: P_{tot} = 150 mW achieved with a printed circuit board.

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

Parameter	Symbol	Conditions		Min	Typ	Max	Unit
Zener voltage *	V_Z	I_Z	Specified value	Refer to the list of the electrical characteristics within part numbers			V
Zener rise 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. 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 Ω, Contact discharge: 10 times)

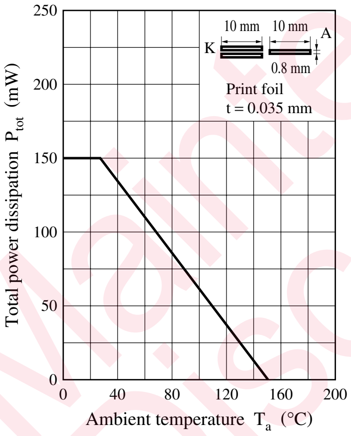
3. ∗: The temperature must be controlled 25°C for V_Z mesurement.
   V_Z value measured at other temperature must be adjusted to V_Z (25°C)
   V_Z guaranted 20 ms after current flow.

■ Electrical characteristics within part numbers $T_a = 25°C \pm 3°C$

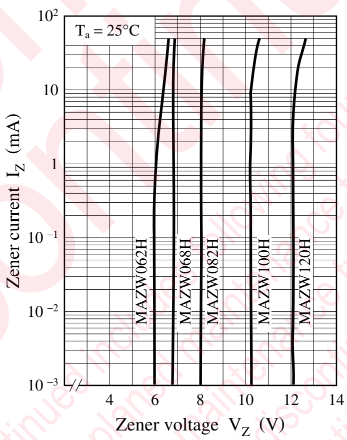
Part number	Zener voltage V_Z (V) Min	Nom	Max	I_Z (mA)	Reverse current (DC) I_R (μA) Max	V_R (V)	Zener operating resistance R_Z (Ω) I_Z = 5 mA Max	R_{ZK} (Ω) I_Z = 0.5 mA Max	Marking symbol
MAZW062H	5.8	6.2	6.6	5	0.2	4	50	100	62
MAZW068H	6.4	6.8	7.2	5	0.1	4	30	60	68
MAZW082H	7.7	8.2	8.7	5	0.1	5	30	60	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 $T_j = 25°C$ to 150°C.

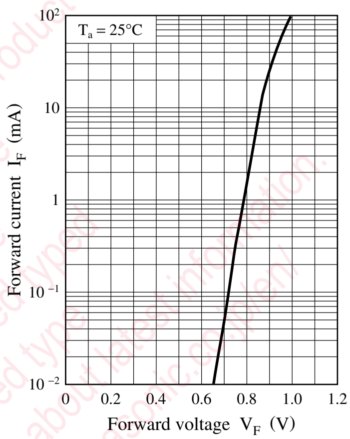
P_{tot} — T_a



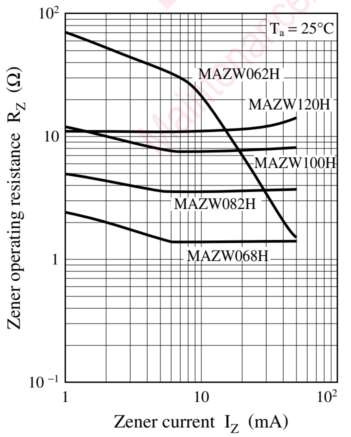
I_Z — V_Z



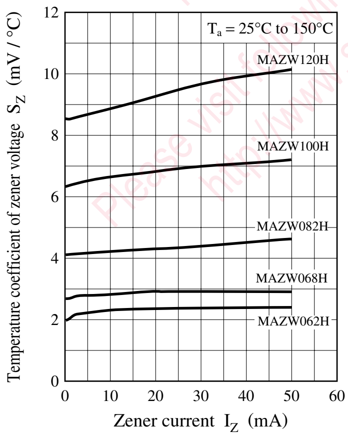
I_F — V_F



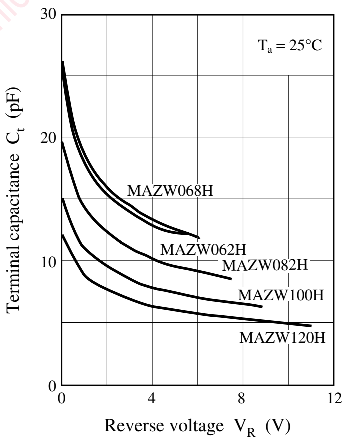
R_Z — I_Z



S_Z — I_Z



C_t — V_R



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