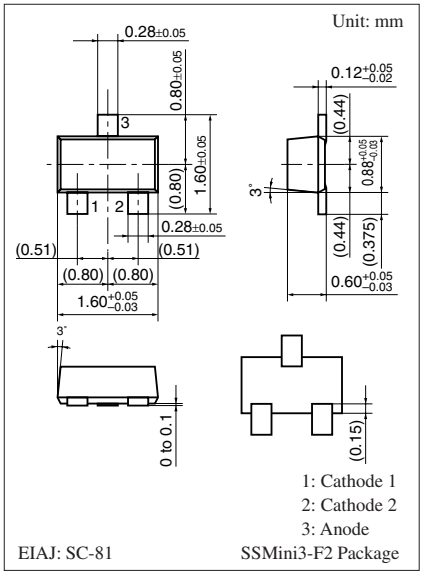
MAZTxxxH Series

Silicon planar type

For surge absorption circuit



■ Features

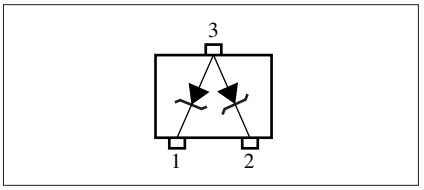
- Two elements anode-common type
- Power dissipation P_D : 150 mW

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Power dissipation *	P_D	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

Note) *: P_D = 150 mW achieved with a printed circuit board.

Internal Connection



■ 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

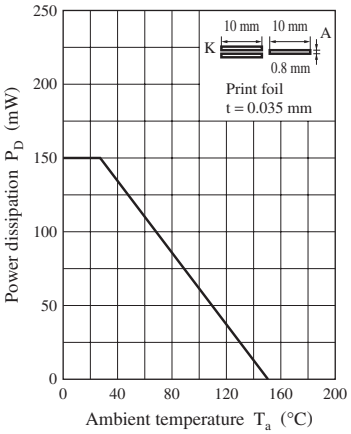
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. Electrostatic breakdown voltage: ±10 kV
Test method: IEC1000-4-2 (C = 150 pF, R = 330 Ω, Contact discharge: 10 times)
3. *: The temperature must be controlled 25°C for V_Z mesurement.
V_Z 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 $T_a = 25°C \pm 3°C$

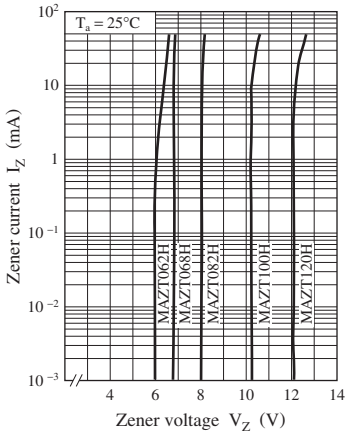
Part number	Zener voltage V_Z (V)				Reverse current I_R (mA)		Zener operating resistance R_Z (Ω)	Zener rise operating resistance R_{ZK} (Ω)	Marking symbol
	Min	Nom	Max	I_Z (mA)	Max	V_R (V)	I_Z = 5 mA Max	I_Z = 0.5 mA Max	
MAZT062H	5.8	6.2	6.6	5	0.2	4	50	100	6.2Z
MAZT068H	6.4	6.8	7.2	5	0.1	4	30	60	6.8Z
MAZT082H	7.7	8.2	8.7	5	0.1	5	30	60	8.2Z
MAZT100H	9.4	10.0	10.6	5	0.05	7	30	60	10Z
MAZT120H	11.4	12.0	12.7	5	0.05	9	30	80	12Z

Note) ∗: I_Z = 1.0 mA

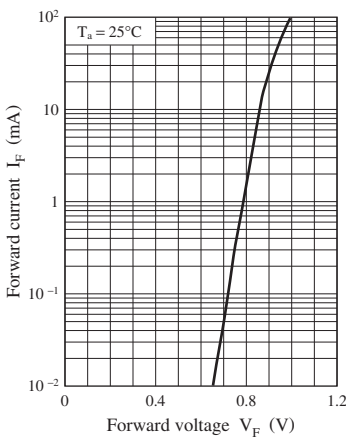
P_D — T_a



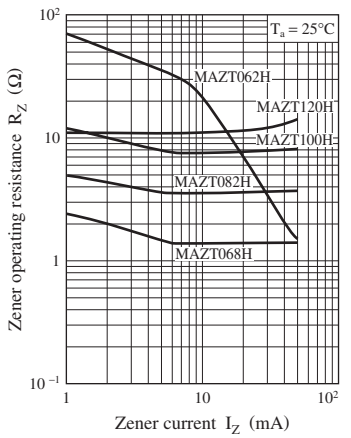
I_Z — V_Z



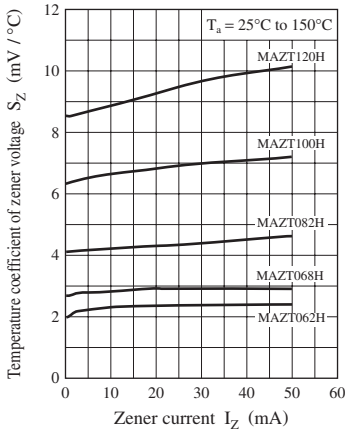
I_F — V_F



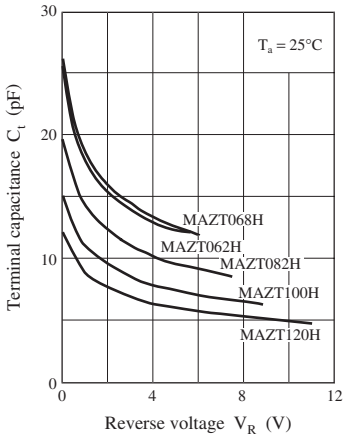
R_Z — I_Z



S_Z — I_Z



C_t — V_R



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