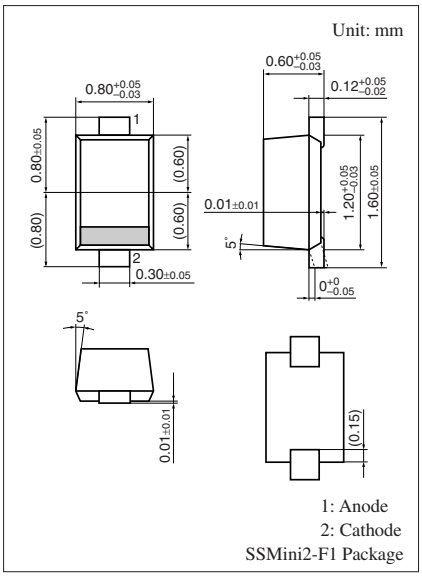
MAYS062

Silicon planar type

For waveform clipper
For surge absorption circuits



Marking Symbol: E6

■ Features

- Low joint capacity zener diode

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	I_{FRM}	200	mA
Total power dissipation *	P_{tot}	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

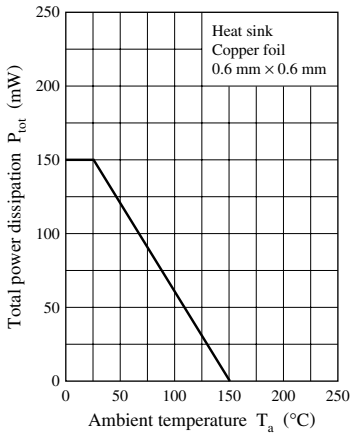
Note) ∗: P_{tot} = 150 mW achieved with a printed circuit board

■ Electrical Characteristics $T_a = 25°C \pm 3°C$ *1

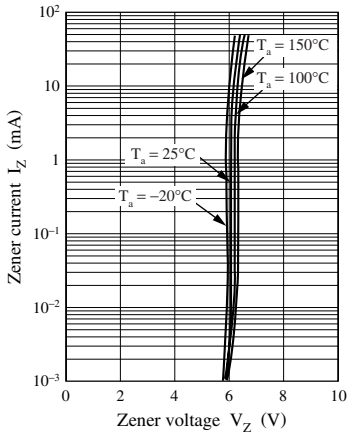
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	I_F = 10 mA		0.9	1.0	V
Zener voltage *2	V_Z	I_Z = 5 mA	5.9		6.5	V
Reverse current	I_R	V_R = 5.5 V			3	μA
Zener rise operating resistance	R_{ZK}	I_Z = 0.5 mA			100	Ω
Zener operating resistance	R_Z	I_Z = 5 mA			30	Ω
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		8		pF

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. Absolute frequency of input and output is 5 MHz.
3. ∗1: 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).
∗2: V_Z guaranteed 20 ms after current flow.

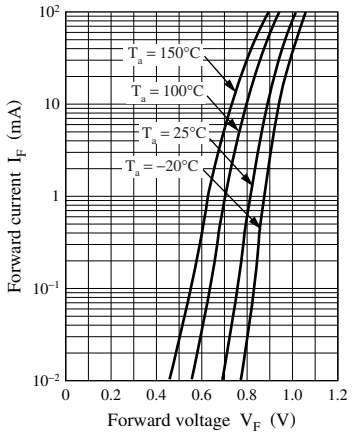
P_{tot} — T_a



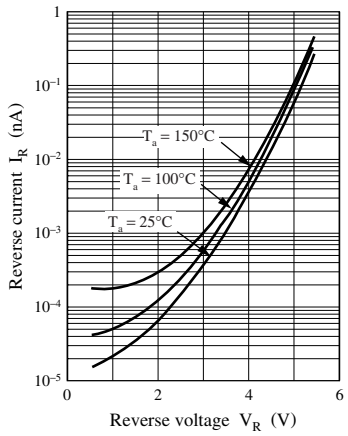
I_Z — V_Z



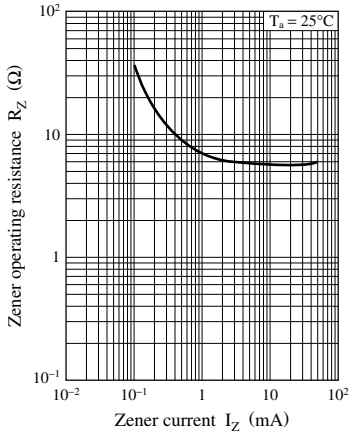
I_F — V_F



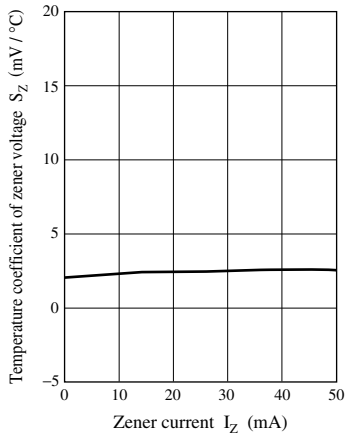
I_R — V_R



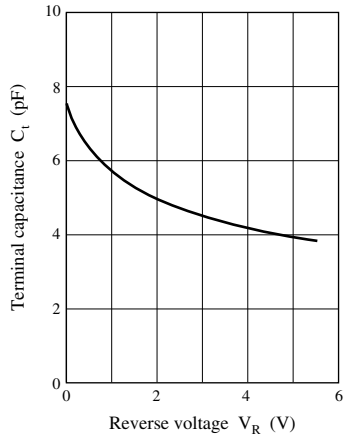
R_Z — I_Z



S_Z — I_Z



C_t — V_R



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