DZ2J039

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

■ Features

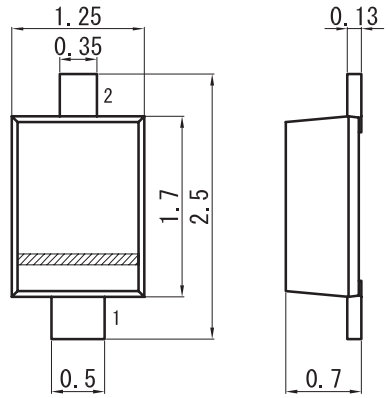
- Excellent rising characteristics of zener current I_z
- Low zener operating resistance R_Z
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: 7J, 7U

■ Packaging

DZ2J039×0L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

Unit: mm



1: Cathode
2: Anode

Panasonic	SMini2-F5-B
JEITA	SC-90A
Code	—

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	I_{FRM}	200	mA
Total power dissipation *1	P_T	200	mW
Electrostatic discharge *2	ESD	±15	kV
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–55 to +150	°C

Note) ∗1: Mounted on glass epoxy print board. (45 mm × 45 mm × 1 mm)
Solder in (Recommended land pattern)
∗2: Test method:IEC61000-4-2 (C = 150 pF, R = 330 Ω, Contact discharge:10 times)

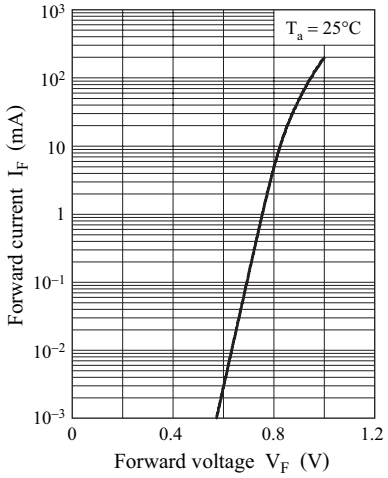
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 10$ mA			1.0	V
Zener voltage *1, 2, 4	V_Z	$I_Z = 5$ mA	3.71		4.10	V
Zener operating resistance	R_Z	$I_Z = 5$ mA			130	Ω
Reverse current	I_R	$V_R = 1$ V			10	μA
Temperature coefficient of zener voltage *3	S_Z	$I_Z = 5$ mA		–1.3		mV/°C

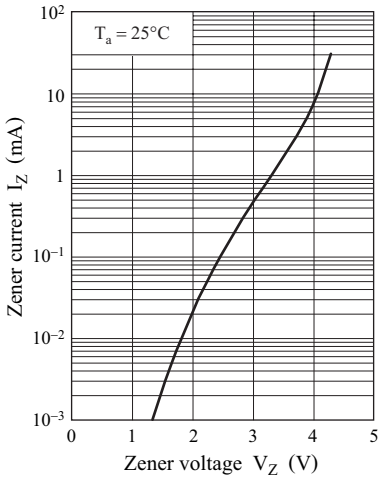
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. Absolute frequency of input and output is 5 MHz.
3. ∗1: The temperature must be controlled 25°C for V_Z measurement. V_Z value measured at other temperature must be adjusted to V_Z (25°C)
∗2: V_Z guaranteed 20 ms after current flow.
∗3: T_j = 25°C to 150°C
∗4: Rank classification

Code	M	0
Rank	M	No-rank
V_Z	3.80 to 4.00	3.71 to 4.10
Marking Symbol	7U	7J

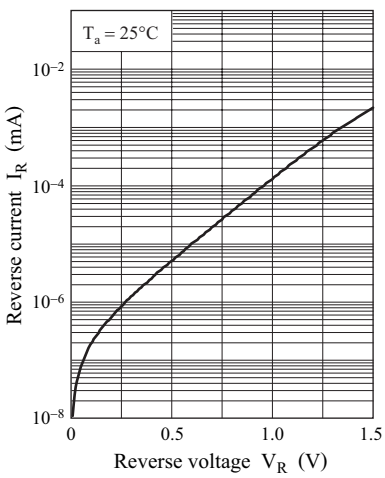
I_F — V_F



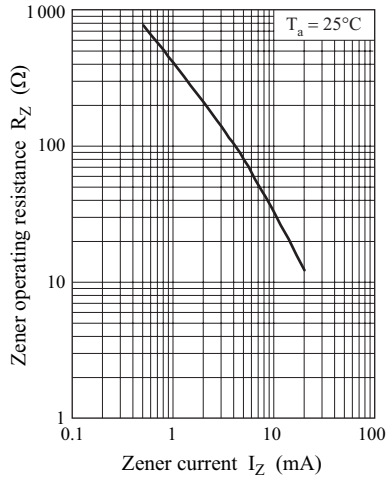
I_Z — V_Z



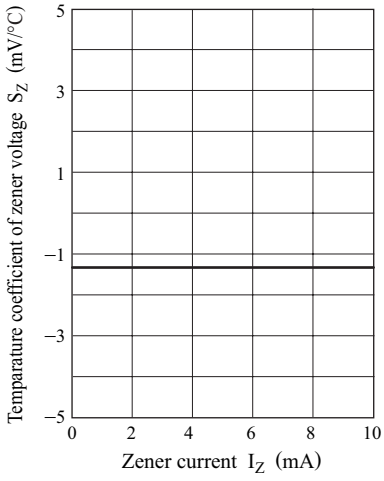
I_R — V_R



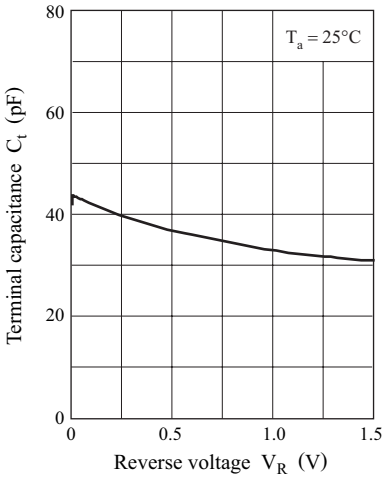
R_Z — I_Z



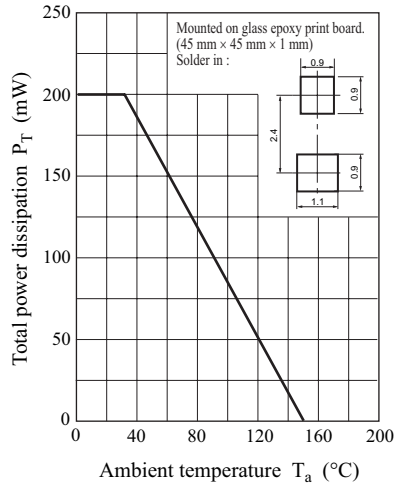
S_Z — I_Z



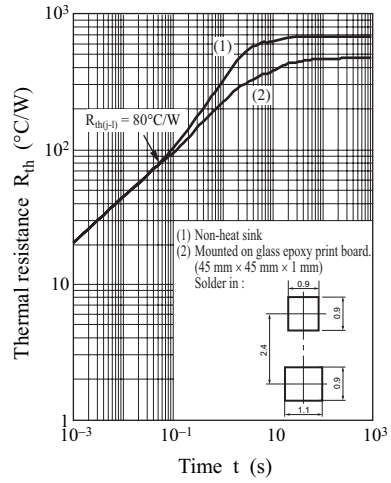
C_t — V_R



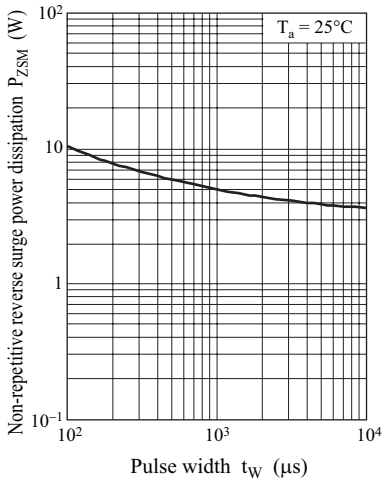
P_T — T_a



R_{th} — t

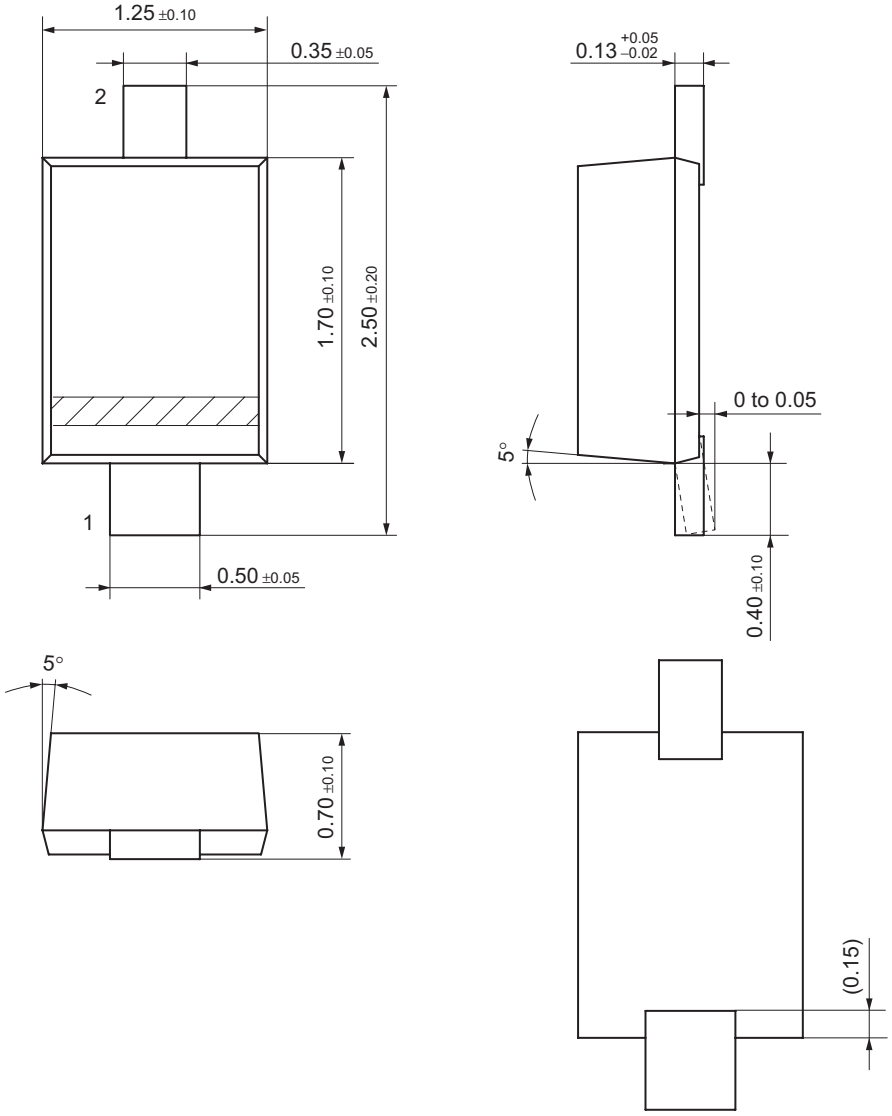


P_{ZSM} — t_W

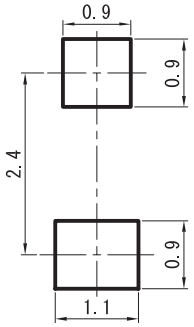


SMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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