

DZ2J140×0L

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: TJ or TU

■ Packaging

Embossed type (Thermo-compression sealing) : 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	IFRM	200	mA
Total power dissipation ^{*1}	PT	200	mW
Electrostatic discharge ^{*2}	ESD	±8	kV
Junction temperature	T _J	150	°C
Operating ambient temperature	T _{opr}	-40 to +85	°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 Ta = 25 °C ± 3 °C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V _F	I _F = 10 mA			1.0	V
Zener voltage ^{*1, *2}	V _Z	I _Z = 5 mA	13.30		14.70	V
Zener operating resistance	R _Z	I _Z = 5 mA			40	Ω
Zener rise operating resistance	R _{ZK}	I _Z = 0.5 mA			80	Ω
Reverse current	I _R	V _R = 10 V			0.05	μA
Temperature coefficient of zener voltage ^{*3}	SZ	I _Z = 5 mA		11.6		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.

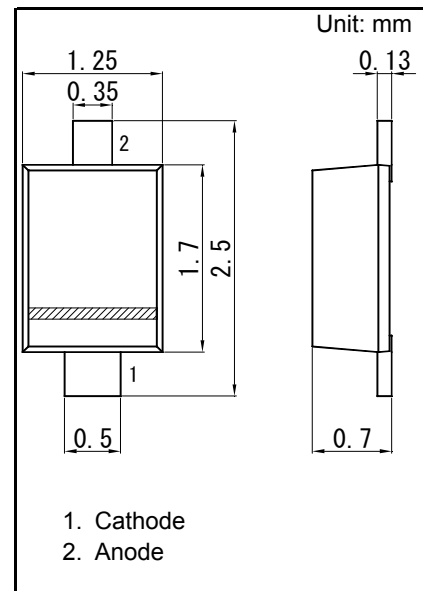
V_Z value measured at other temperature must be adjusted to V_Z (25 °C).

*2 V_Z guaranteed 20 ms after current flow

*3 T_J = 25 °C to 150 °C

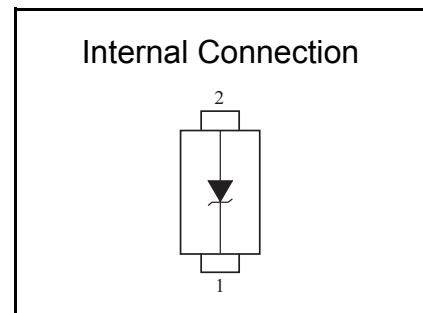
Rank classification

Code	M	0
Rank	M	No-rank
V _Z	13.65 to 14.35	13.30 to 14.70
Marking symbol	TU	TJ

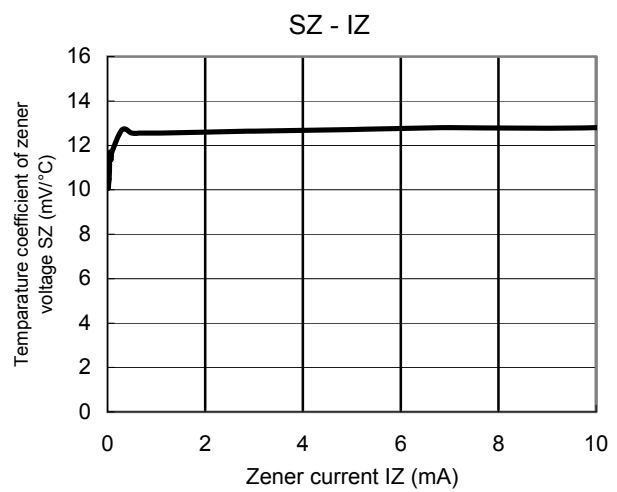
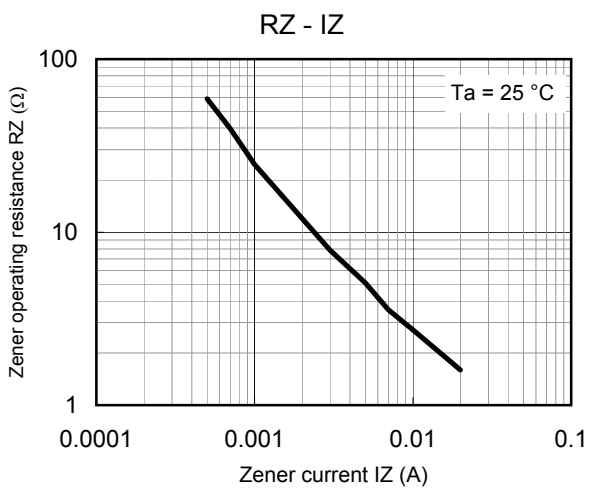
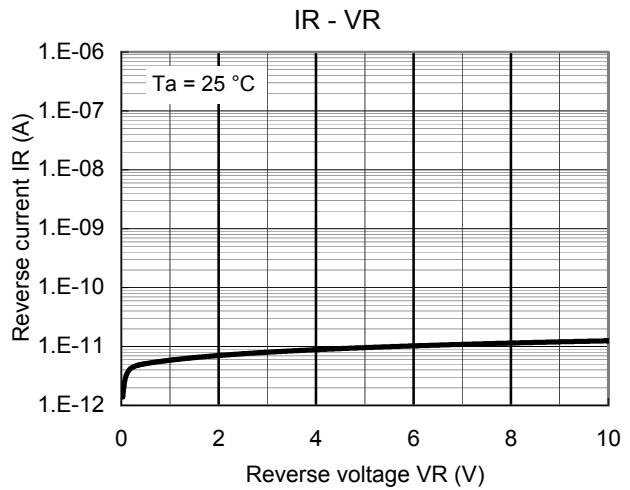
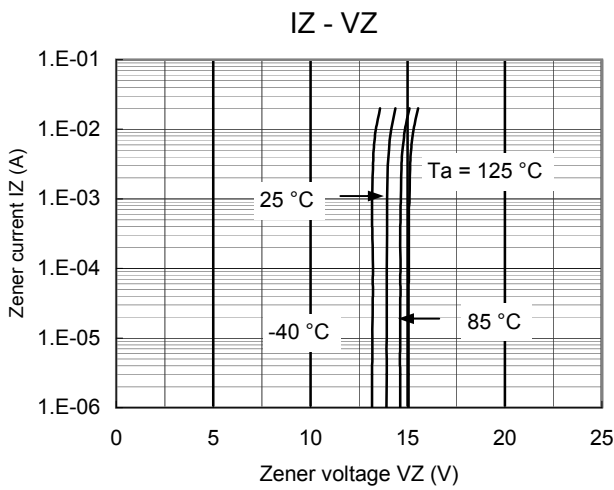
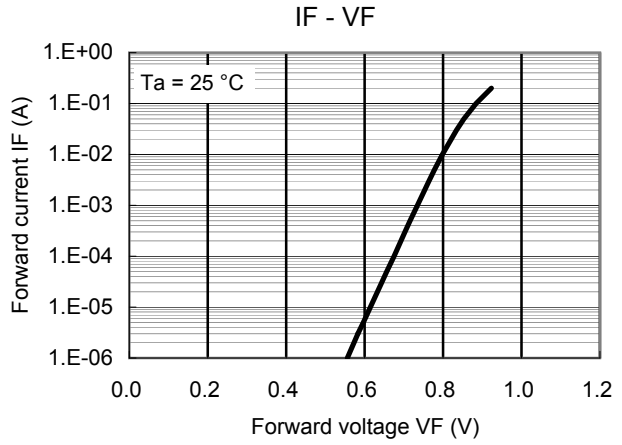
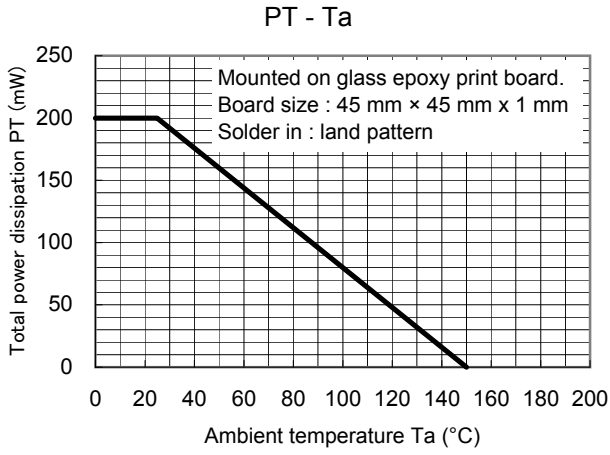


1. Cathode
 2. Anode

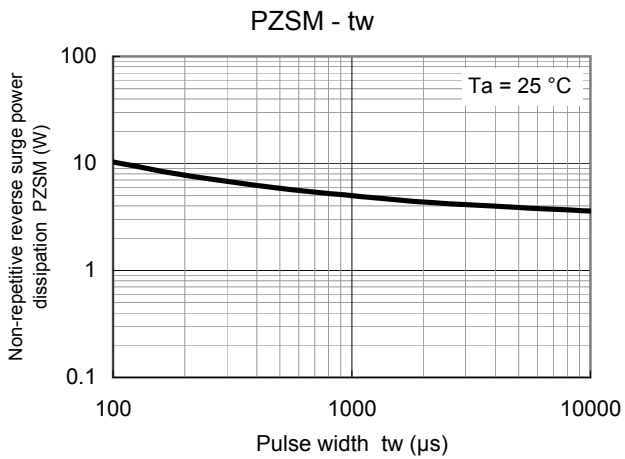
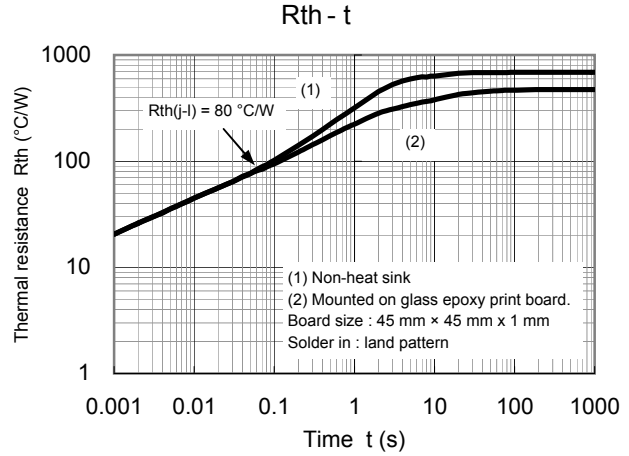
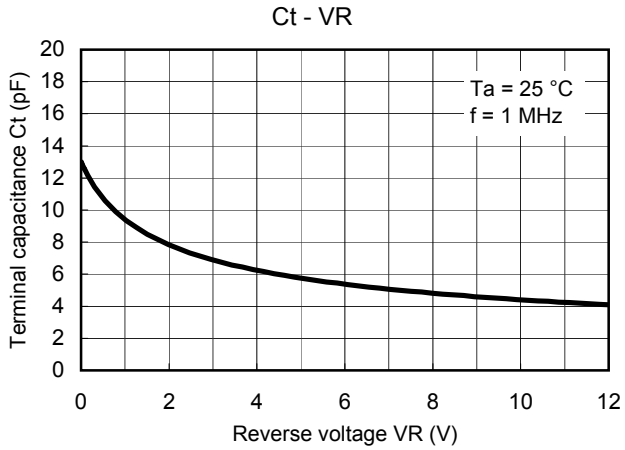
Panasonic	SMini2-F5-B
JEITA	SC-90A
Code	—



Technical Data (reference)

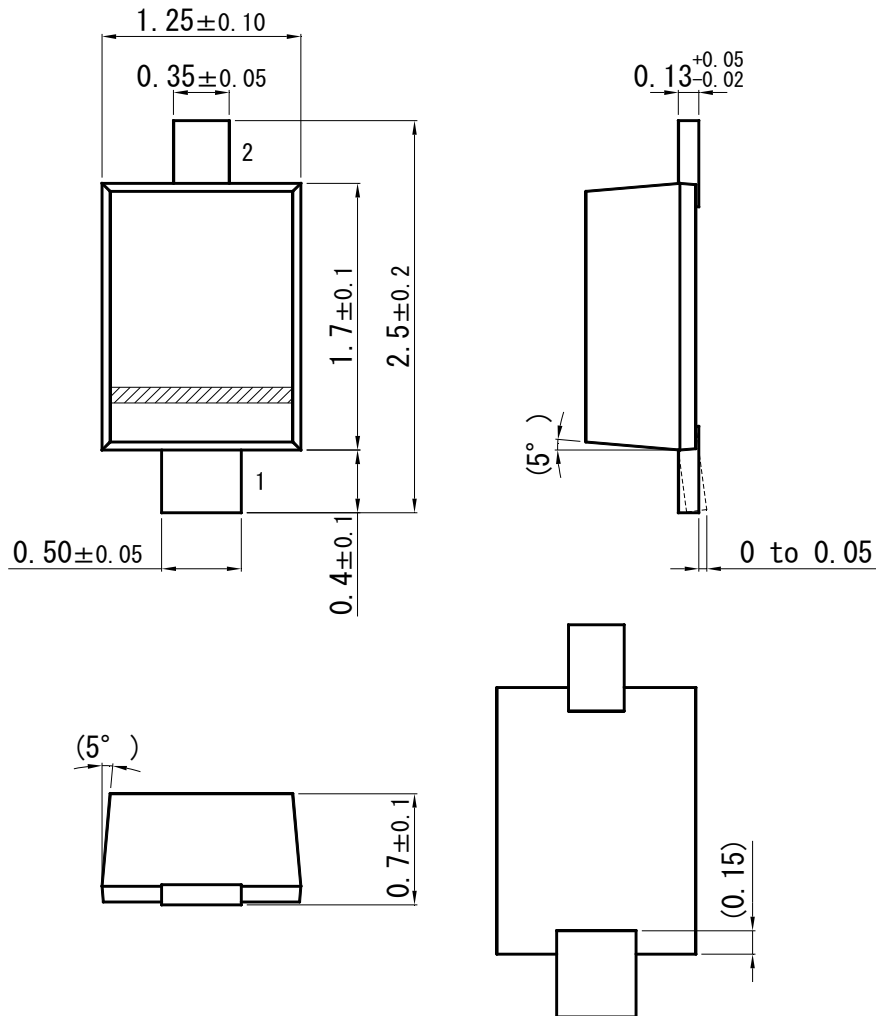


Technical Data (reference)



SMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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