

DZ2J140×0L

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

■ Features

- Excellent rising characteristics of zener current I<sub>Z</sub>
- Low zener operating resistance R<sub>Z</sub>
- 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 <sup>*1</sup>	PT	200	mW
Electrostatic discharge <sup>*2</sup>	ESD	±8	kV
Junction temperature	T <sub>j</sub>	150	°C
Operating ambient temperature	T <sub>opr</sub>	-40 to +85	°C
Storage temperature	T <sub>stg</sub>	-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 <sub>F</sub>	I <sub>F</sub> = 10 mA			1.0	V
Zener voltage <sup>*1, *2</sup>	V <sub>Z</sub>	I <sub>Z</sub> = 5 mA	13.30		14.70	V
Zener operating resistance	R <sub>Z</sub>	I <sub>Z</sub> = 5 mA			40	Ω
Zener rise operating resistance	R <sub>ZK</sub>	I <sub>Z</sub> = 0.5 mA			80	Ω
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 10 V			0.05	μA
Temperature coefficient of zener voltage <sup>*3</sup>	SZ	I <sub>Z</sub> = 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<sub>Z</sub> measurement.

V<sub>Z</sub> value measured at other temperature must be adjusted to V<sub>Z</sub> (25 °C).

\*2 V<sub>Z</sub> guaranteed 20 ms after current flow

\*3 T<sub>j</sub> = 25 °C to 150 °C

Rank classification

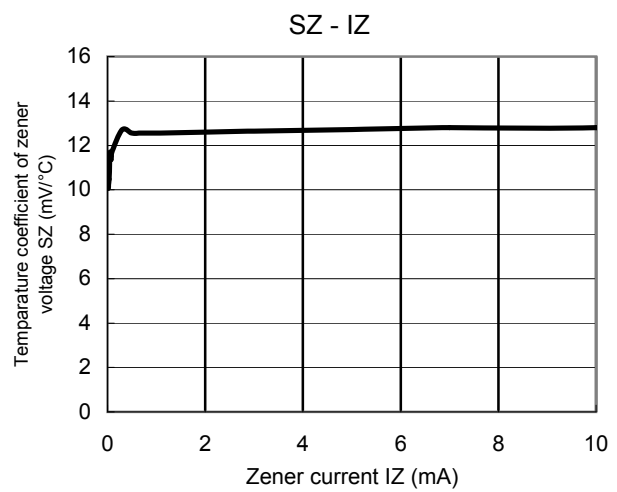
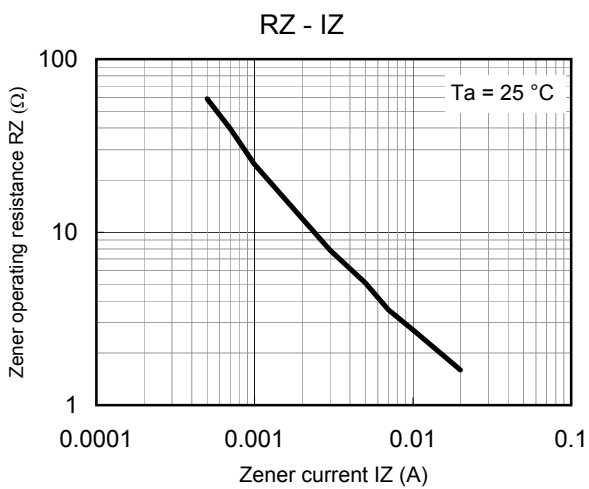
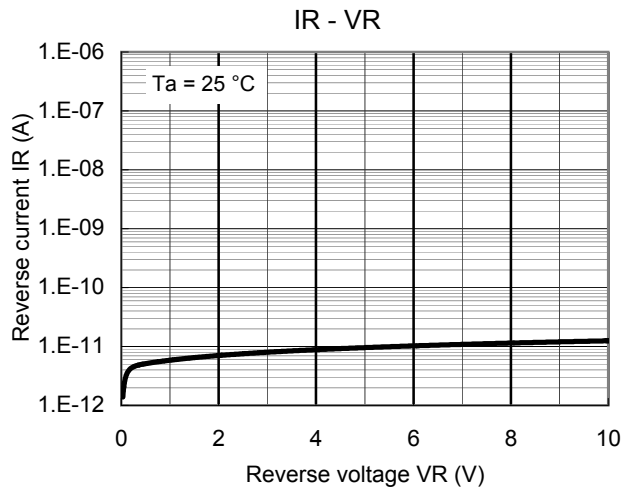
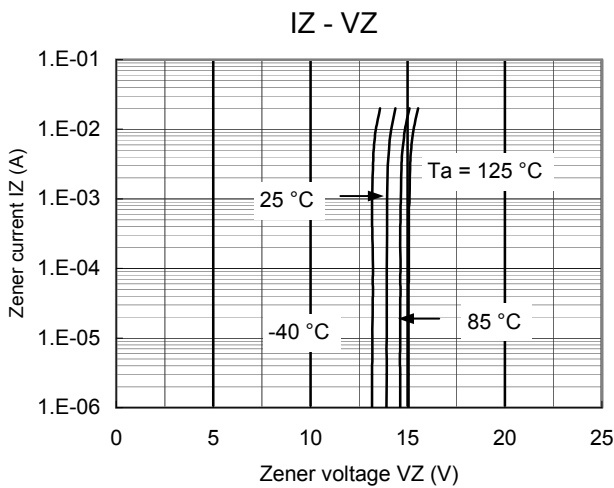
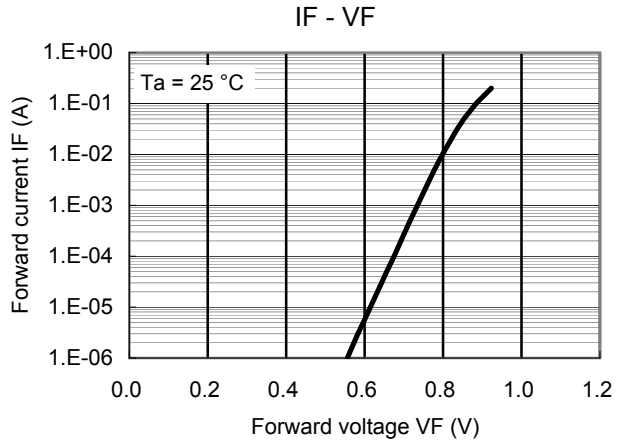
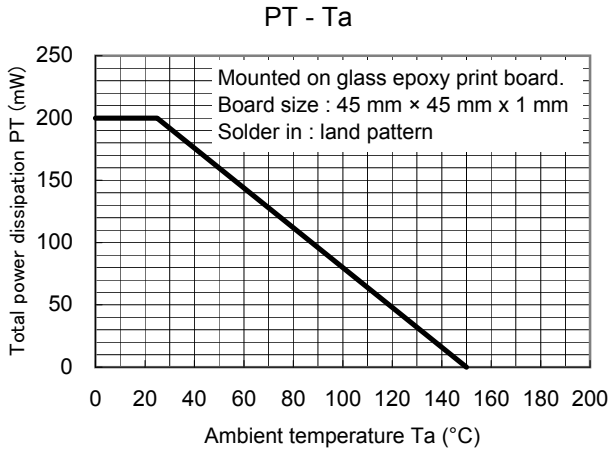
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Rank	M	No-rank
V <sub>Z</sub>	13.65 to 14.35	13.30 to 14.70
Marking symbol	TU	TJ



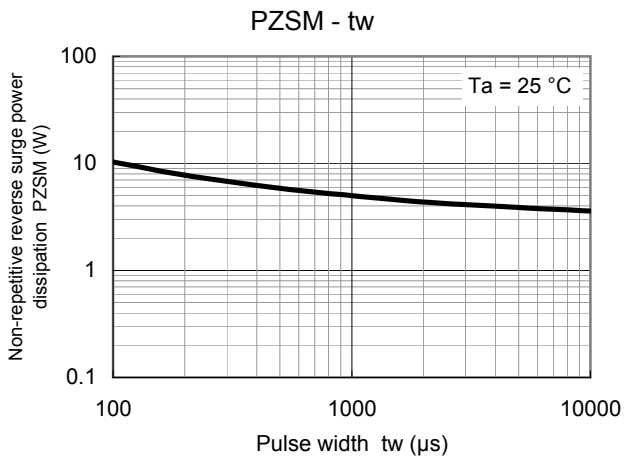
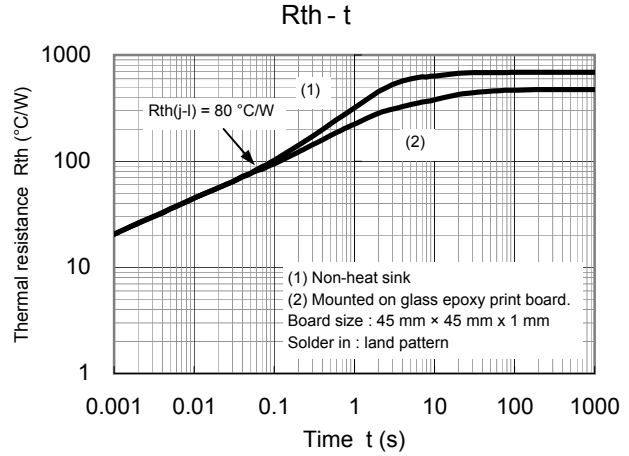
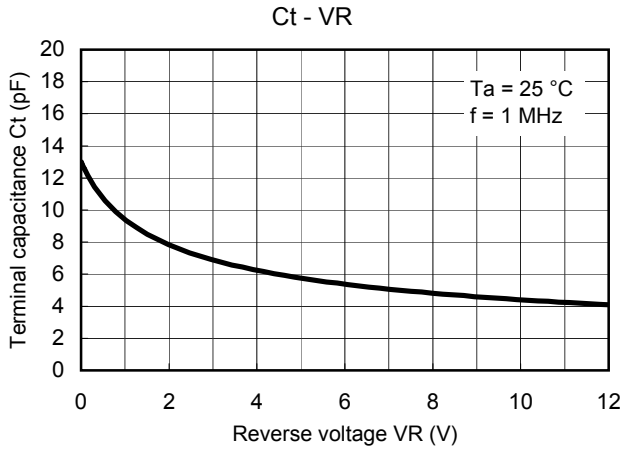
Panasonic	SMini2-F5-B
JEITA	SC-90A
Code	—



Technical Data ( reference )



Technical Data ( reference )



SMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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