

**DZ2S033×0L**

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit  
 DZ2J033 in SSMini2 type package

■ 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: 5J or 5U

■ 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	150	mW
Electrostatic discharge <sup>*2</sup>	ESD	±15	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 ( 0.8 mm × 0.6 mm )

\*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	3.14		3.47	V
Zener operating resistance	R <sub>Z</sub>	I <sub>Z</sub> = 5 mA			130	Ω
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 1 V			20	μA
Temperature coefficient of zener voltage <sup>*3</sup>	SZ	I <sub>Z</sub> = 5 mA		-2.1		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

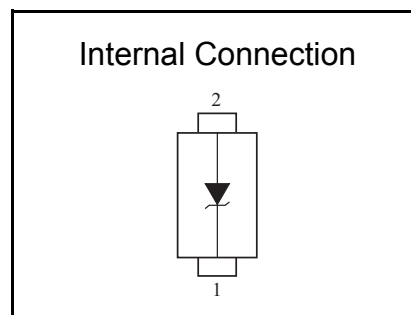
\*3 T<sub>J</sub> = 25 °C to 150 °C

Rank classification

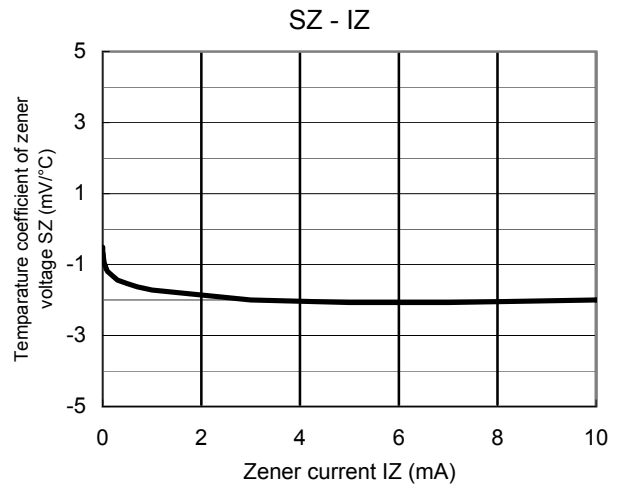
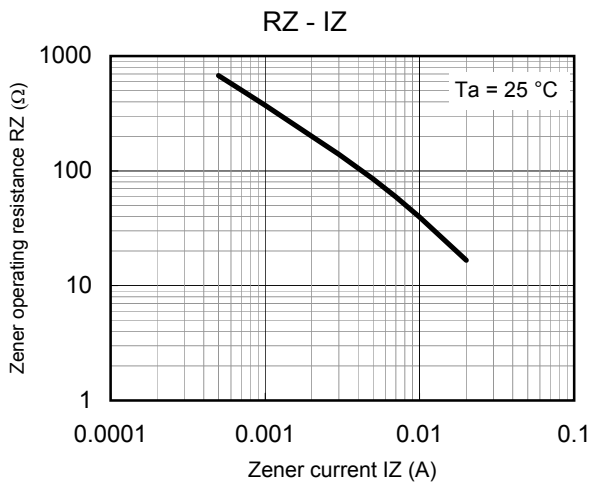
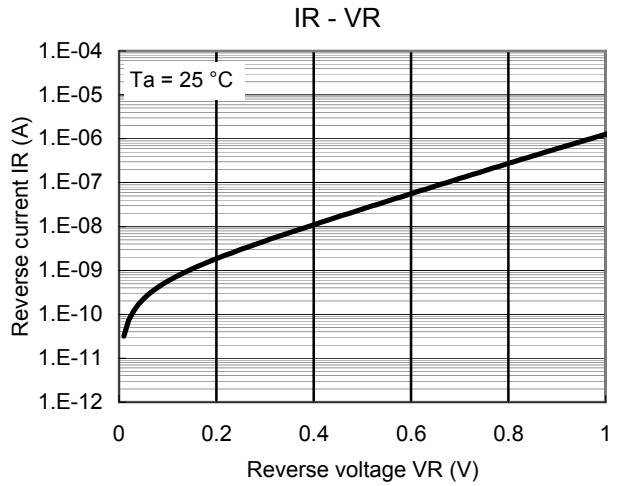
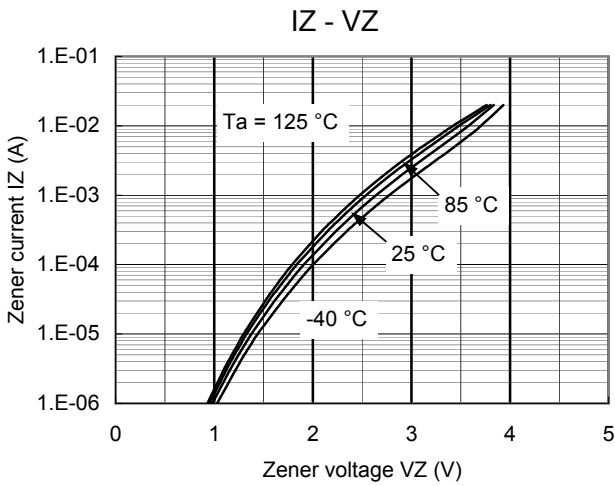
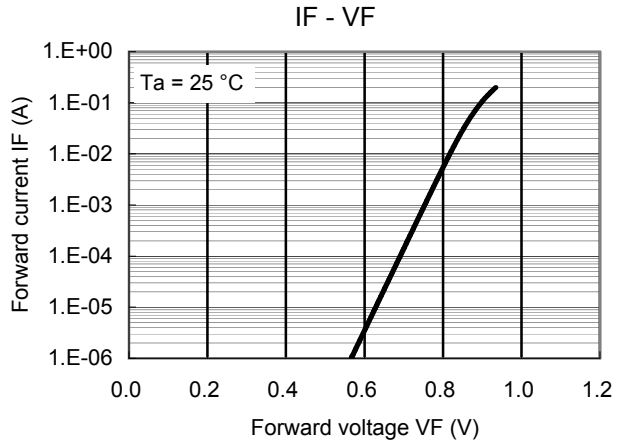
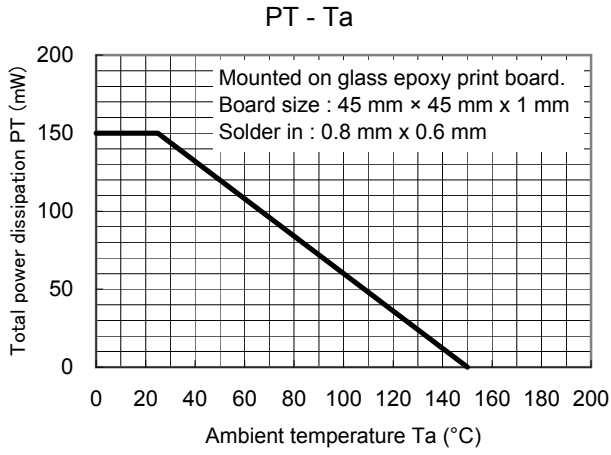
Code	M	0
Rank	M	No-rank
V <sub>Z</sub>	3.22 to 3.38	3.14 to 3.47
Marking symbol	5U	5J



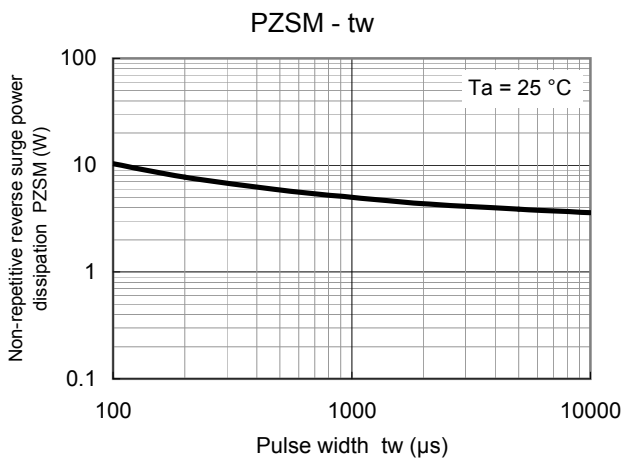
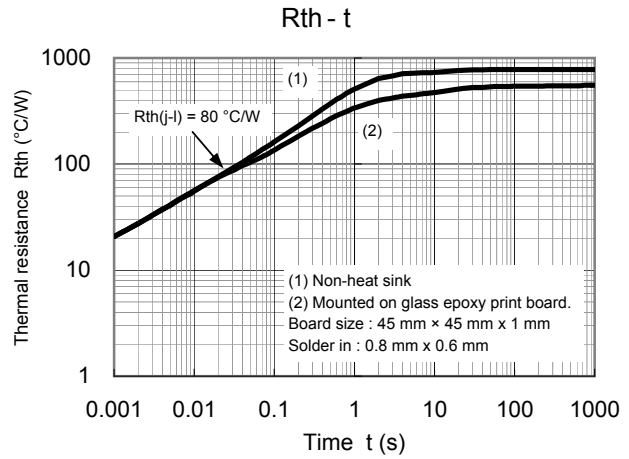
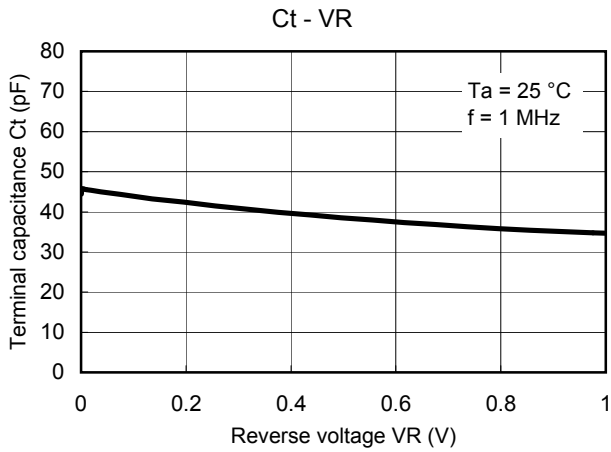
Panasonic	SSMini2-F5-B
JEITA	SC-79
Code	SOD-523



Technical Data ( reference )



Technical Data ( reference )



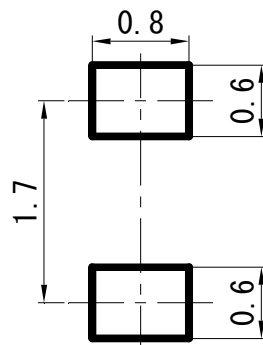


### SSMini2-F5-B

Unit: mm



#### ■ Land Pattern (Reference) (Unit: mm)



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