

DZ2S100

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit
DZ2J100 in SSMini2 type package

■ 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: NJ, NU

■ Packaging

DZ2S100×0L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	I_{FRM}	200	mA
Total power dissipation *1	P_T	150	mW
Electrostatic discharge *2	ESD	± 8	kV
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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)

■ Common Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 10 \text{ mA}$			1.0	V
Zener voltage *1, 2, 4	V_Z	$I_Z = 5 \text{ mA}$	9.50		10.50	V
Zener operating resistance	R_Z	$I_Z = 5 \text{ mA}$			30	Ω
Zener rise operating resistance	R_{ZK}	$I_Z = 0.5 \text{ mA}$			60	Ω
Reverse current	I_R	$V_R = 7 \text{ V}$			0.05	μA
Temperature coefficient of zener voltage *3	S_Z	$I_Z = 5 \text{ mA}$		7.2		mV/ $^\circ\text{C}$

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.

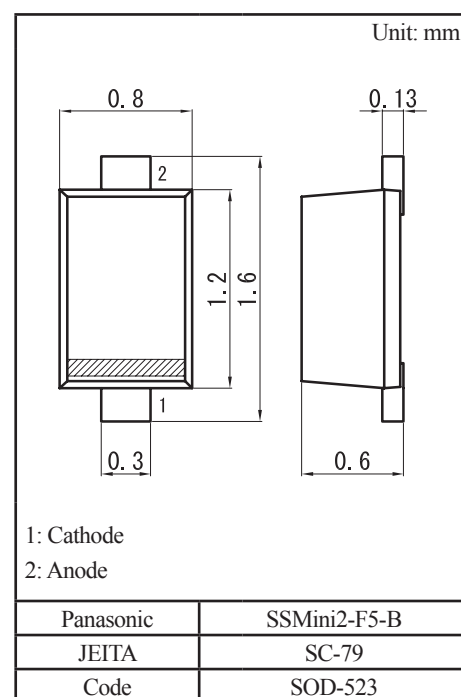
3. *1: The temperature must be controlled 25 $^\circ\text{C}$ for V_Z measurement. V_Z value measured at other temperature must be adjusted to $V_Z(25^\circ\text{C})$

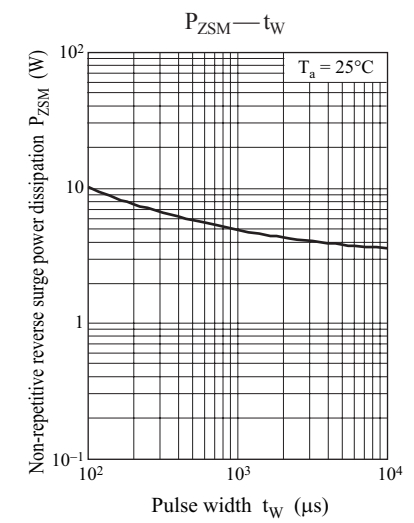
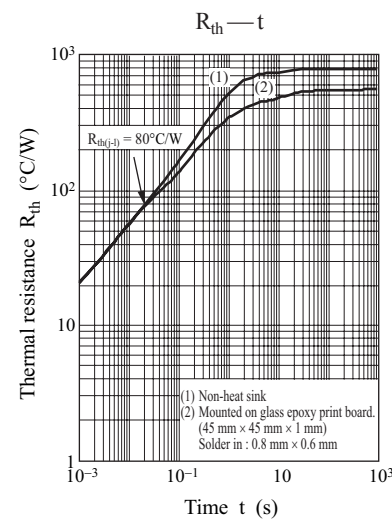
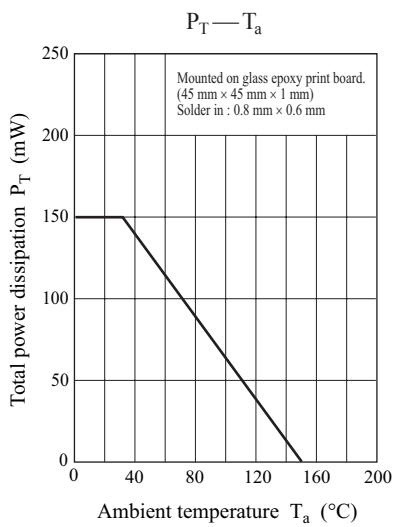
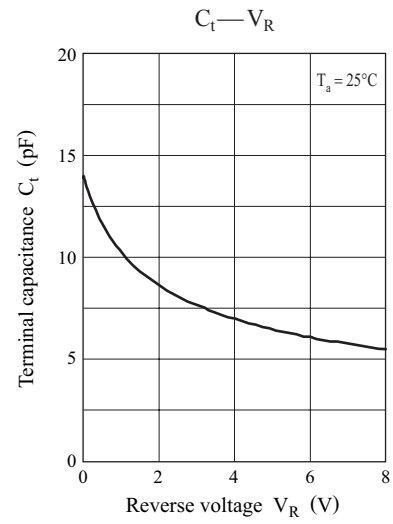
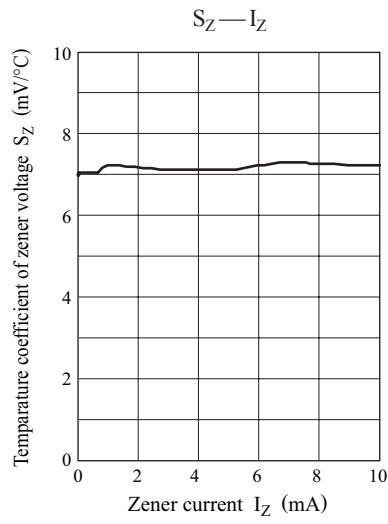
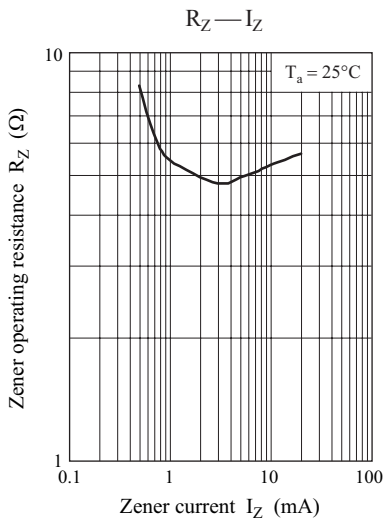
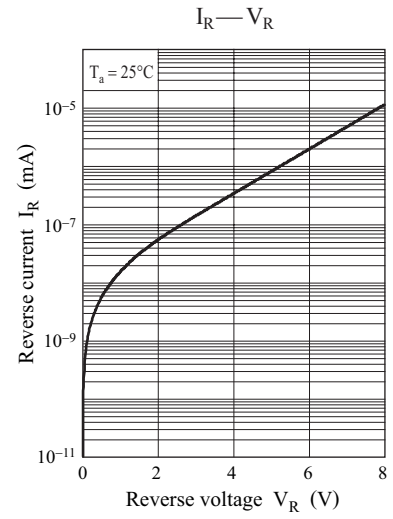
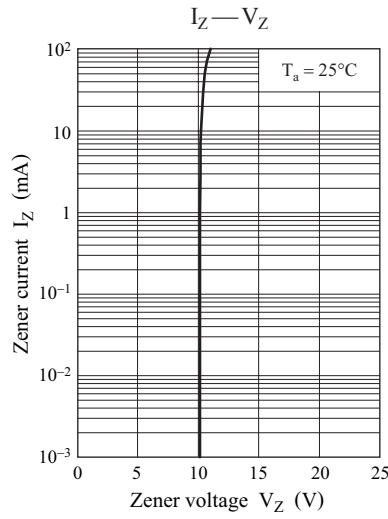
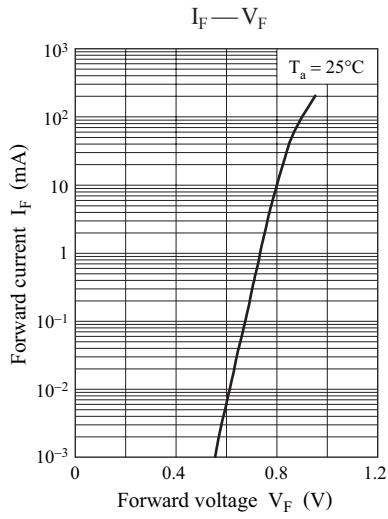
*2: V_Z guaranteed 20 ms after current flow.

*3: $T_j = 25^\circ\text{C}$ to 150 $^\circ\text{C}$

*4: Rank classification

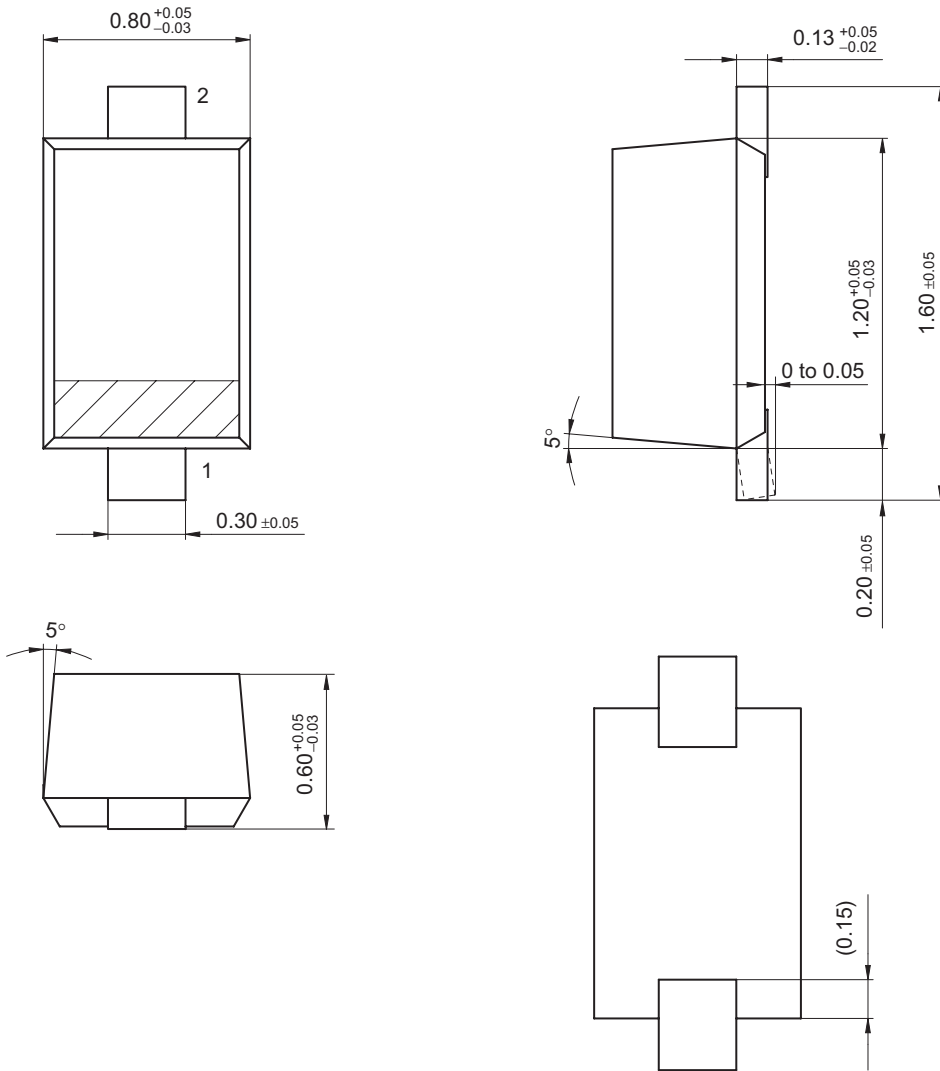
Code	M	0
Rank	M	No-rank
V_Z	9.75 to 10.25	9.50 to 10.50
Marking Symbol	NU	NJ



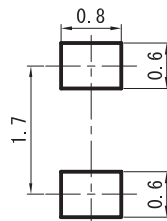


SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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