

DZ2S220

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit
DZ2J220 in SSMini2 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: CG, CR

■ Packaging

DZ2S220×0L 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	°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 (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	$I_Z = 5 \text{ mA}$	20.90		23.10	V
Zener operating resistance	R_Z	$I_Z = 5 \text{ mA}$			80	Ω
Zener rise operating resistance	R_{ZK}	$I_Z = 0.5 \text{ mA}$			100	Ω
Reverse current	I_R	$V_R = 17 \text{ V}$			0.05	μA
Temperature coefficient of zener voltage *3	S_Z	$I_Z = 5 \text{ mA}$		22.2		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.

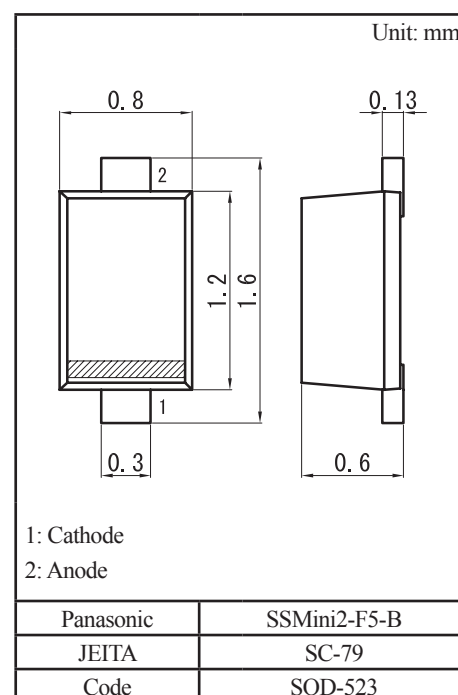
3. *1: The temperature must be controlled 25°C for V_Z measurement. V_Z value measured at other temperature must be adjusted to $V_Z(25^\circ\text{C})$

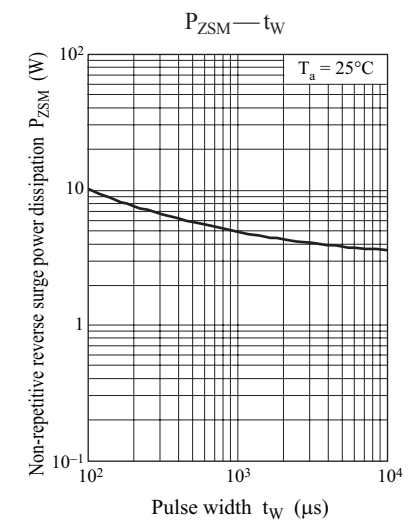
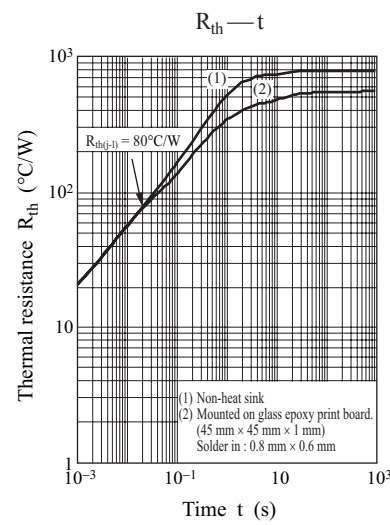
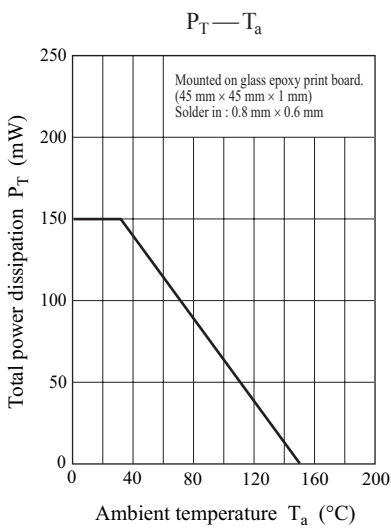
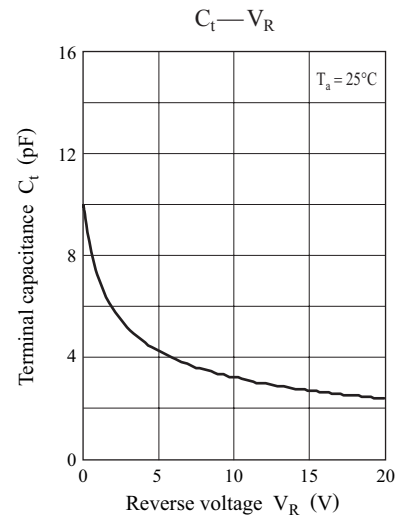
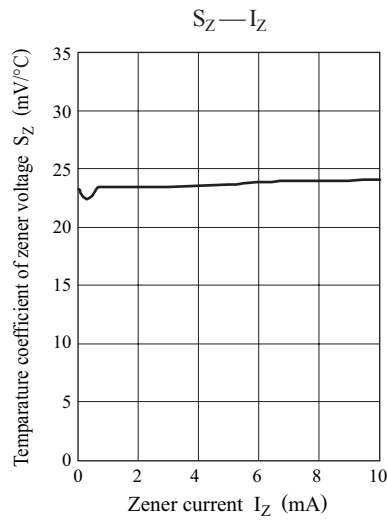
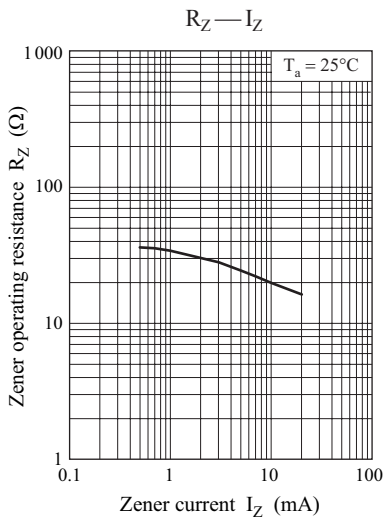
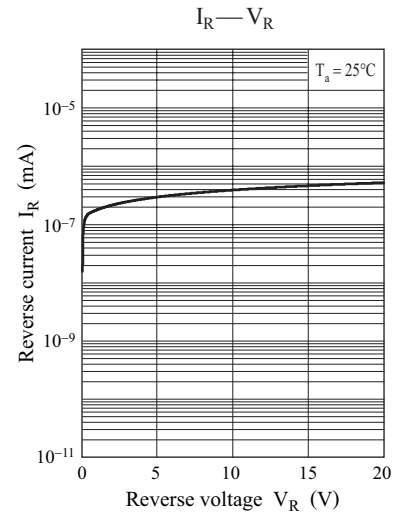
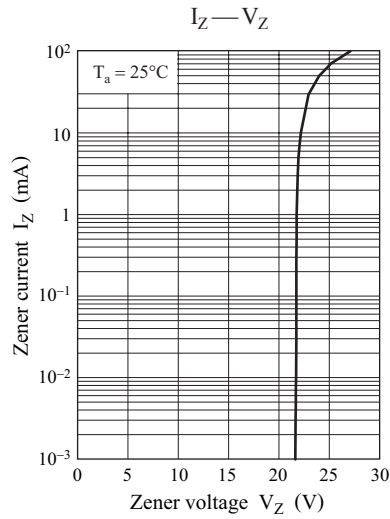
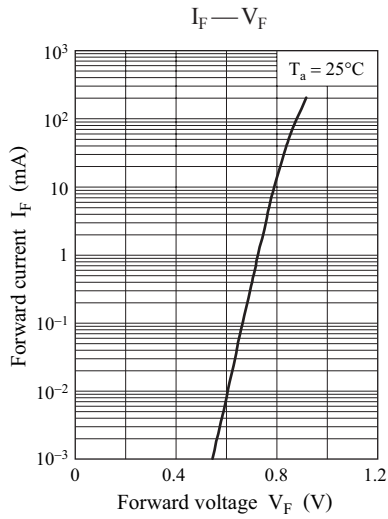
*2: V_Z guaranteed 20 ms after current flow.

*3: $T_j = 25^\circ\text{C}$ to 150°C

*4: Rank classification

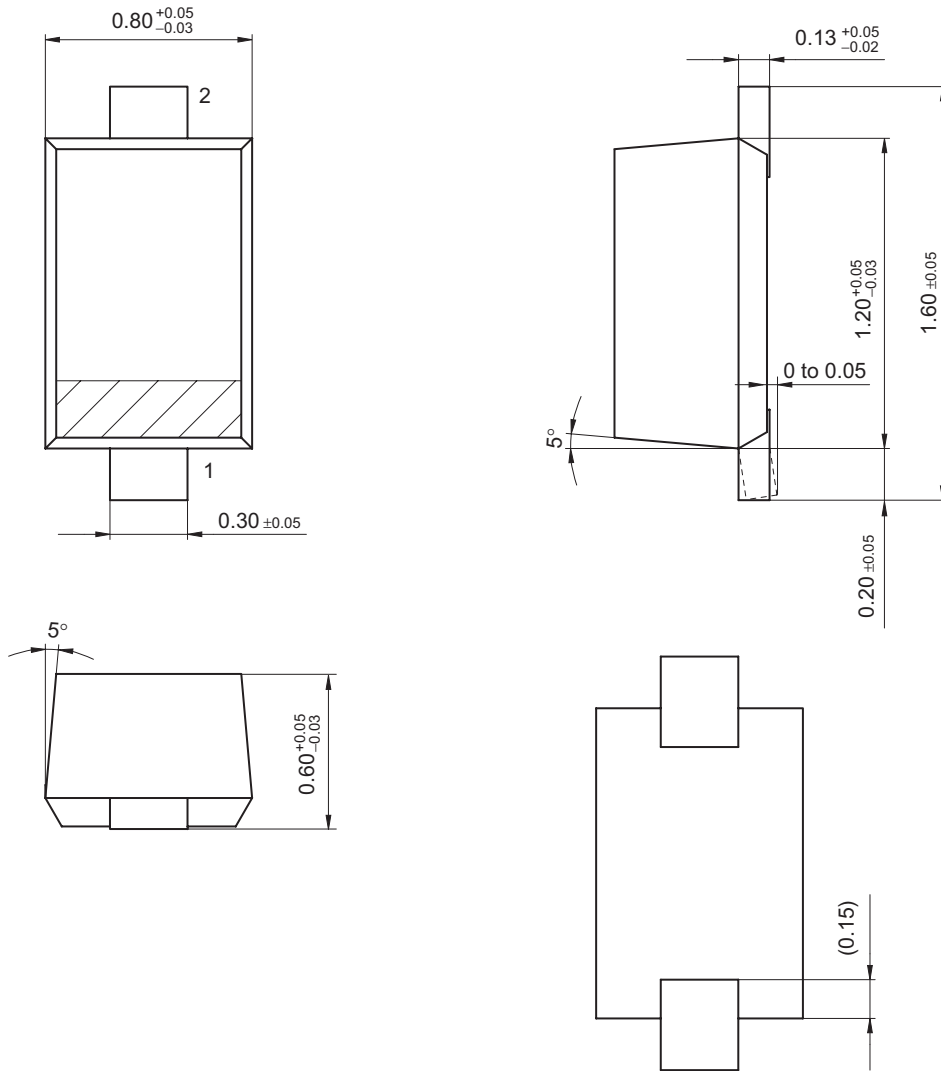
Code	M	0
Rank	M	No-rank
V_Z	21.45 to 22.55	20.90 to 23.10
Marking Symbol	CR	CG



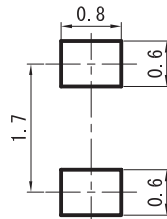


SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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