

# DZ2S033

## Silicon epitaxial planar type

For constant voltage / For surge absorption circuit  
DZ2J033 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: 5J, 5U

### ■ Packaging

DZ2S033×0L 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	±15	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	$V_Z$	$I_Z = 5 \text{ mA}$	3.14		3.47	V
Zener operating resistance	$R_Z$	$I_Z = 5 \text{ mA}$			130	Ω
Reverse current	$I_R$	$V_R = 1 \text{ V}$			20	μA
Temperature coefficient of zener voltage *3	$S_Z$	$I_Z = 5 \text{ mA}$		-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.

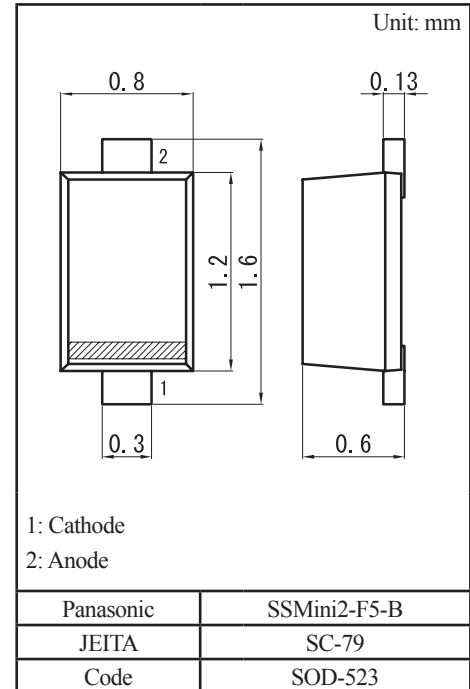
3. \*1: The temperature must be controlled 25°C for  $V_Z$  measurement.  $V_Z$  value measured at other temperature must be adjusted to  $V_Z(25^\circ\text{C})$

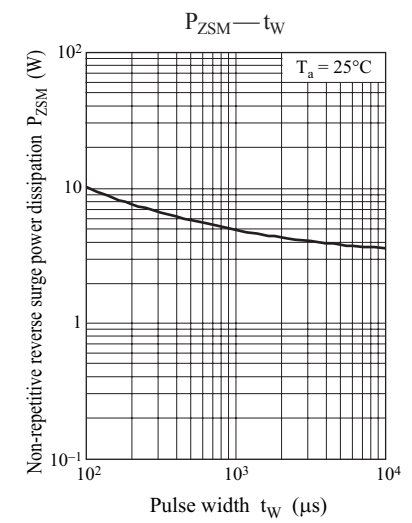
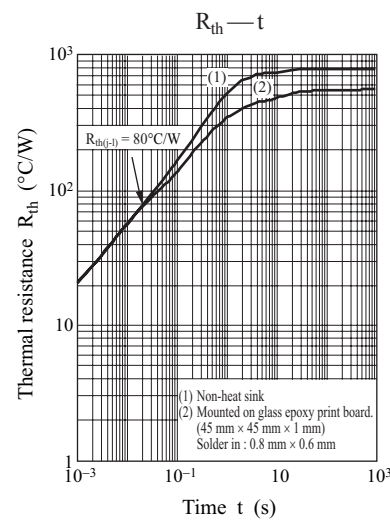
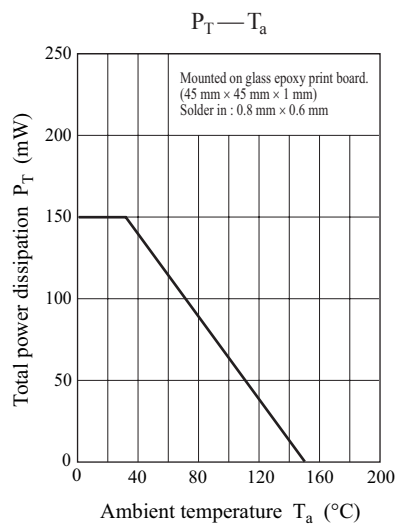
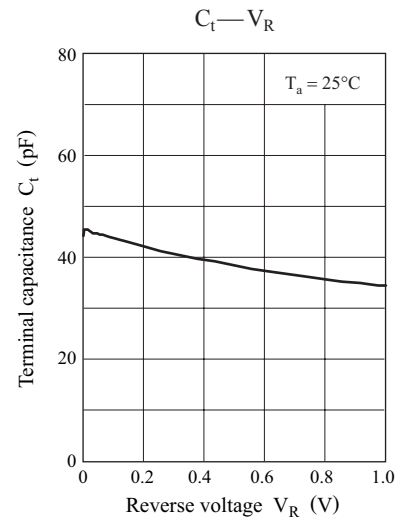
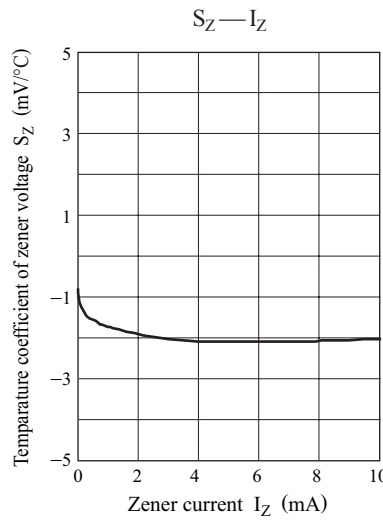
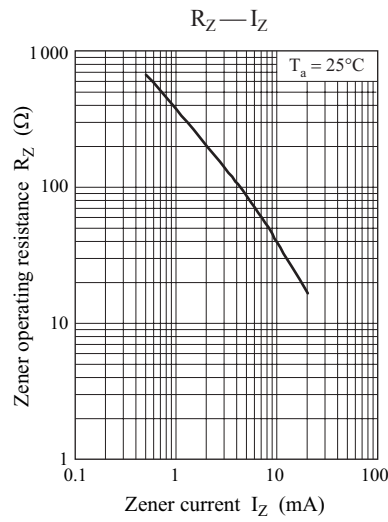
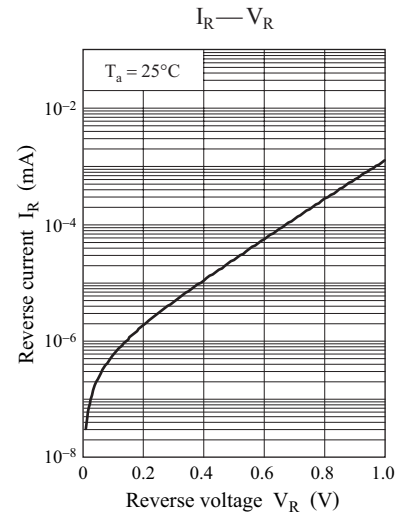
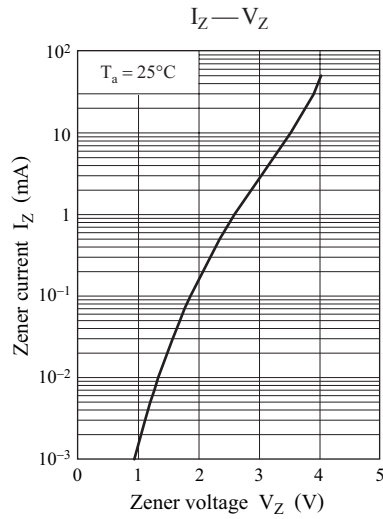
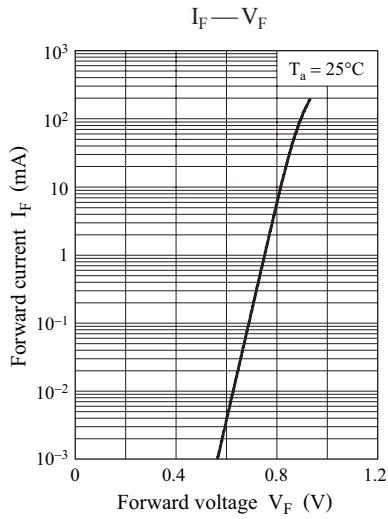
\*2:  $V_Z$  guaranteed 20 ms after current flow.

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

\*4: Rank classification

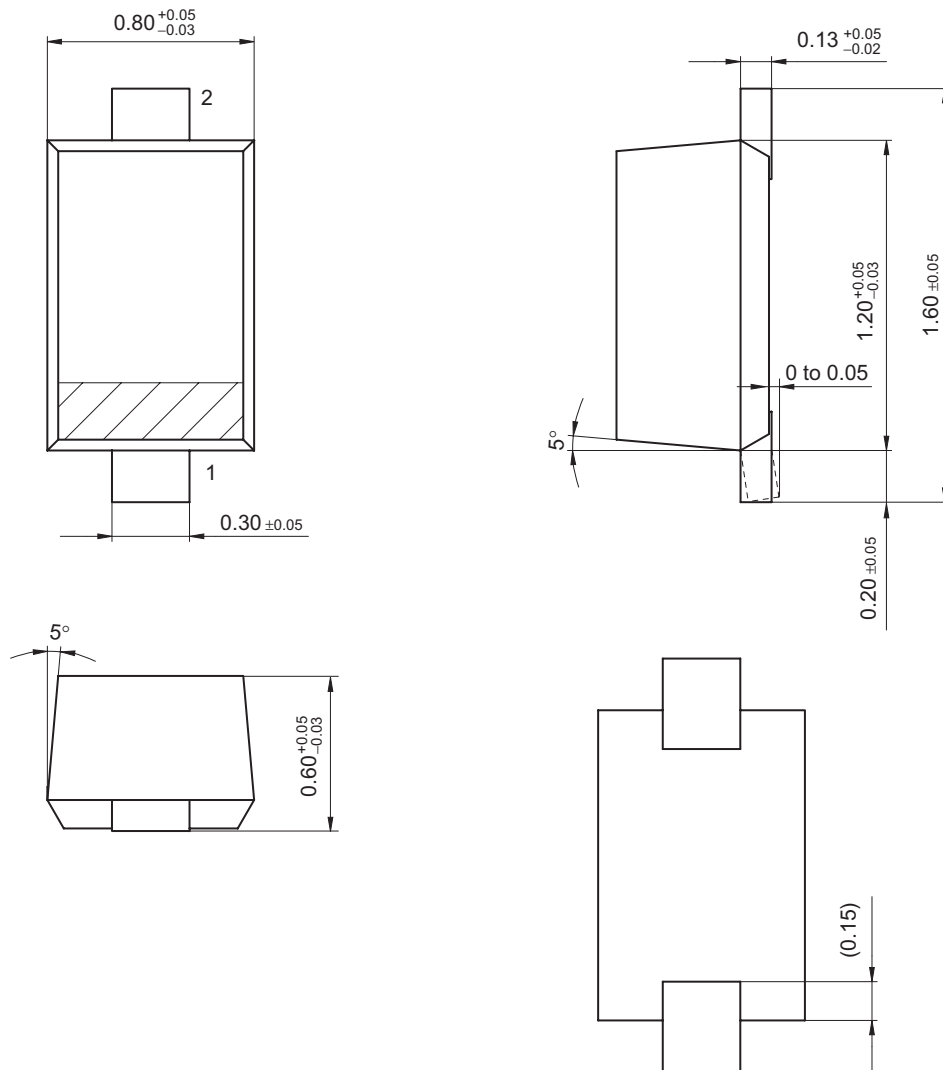
Code	M	0
Rank	M	No-rank
$V_Z$	3.22 to 3.38	3.14 to 3.47
Marking Symbol	5U	5J



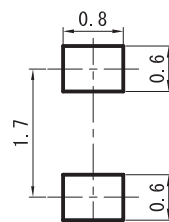


SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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