

# DZ5X068D

## Silicon epitaxial planar type

For surge absorption circuits

### ■ 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: 02

### ■ Basic Part Number

Dual DZ3X068D (Common anode)

### ■ Packaging

DZ5X068D0R Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

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

Parameter	Symbol	Rating	Unit
Total power dissipation *1	$P_T$	200	mW
Electrostatic discharge *2	ESD	$\pm 10$	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)(4 diode total)  
Solder in (0.7 mm × 1.0 mm)

\*2: Test method: IEC61000-4-2 (C = 150 pF, R = 330  $\Omega$ , Contact discharge: 10 times)

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

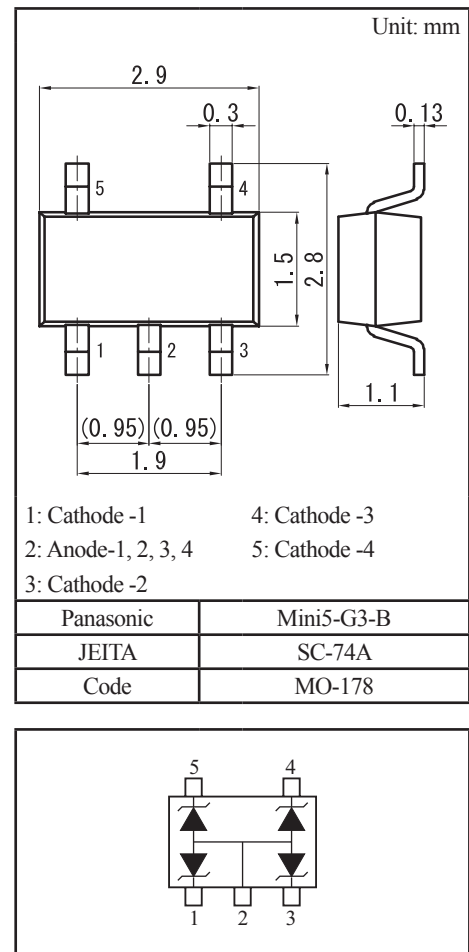
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 10 \text{ mA}$			1.0	V
Zener voltage *1,2	$V_Z$	$I_Z = 5 \text{ mA}$	6.46		7.14	V
Zener operating resistance	$R_Z$	$I_Z = 5 \text{ mA}$			30	$\Omega$
Zener rise operating resistance	$R_{ZK}$	$I_Z = 0.5 \text{ mA}$			60	$\Omega$
Reverse current	$I_R$	$V_R = 4.0 \text{ V}$			0.1	$\mu\text{A}$
Temperature coefficient of zener voltage *3	$S_Z$	$I_Z = 5 \text{ mA}$		3.1		mV/ $^\circ\text{C}$

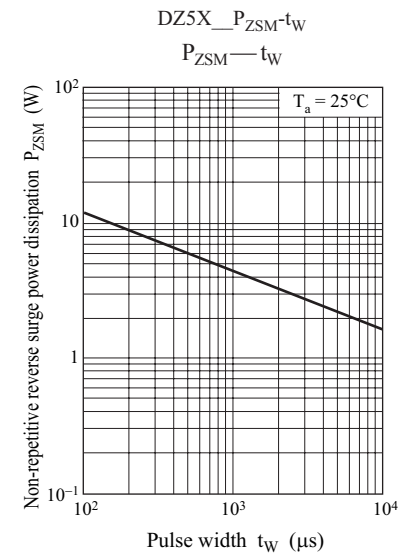
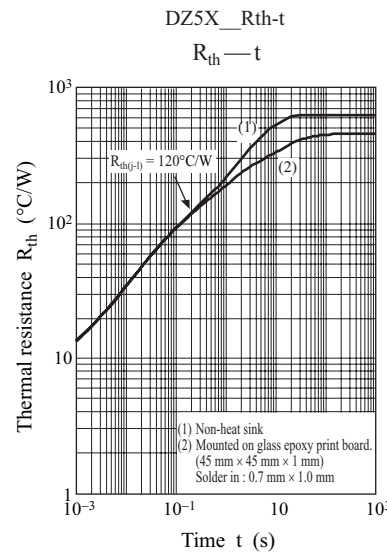
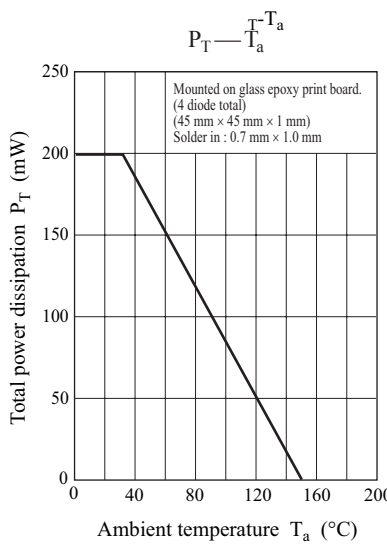
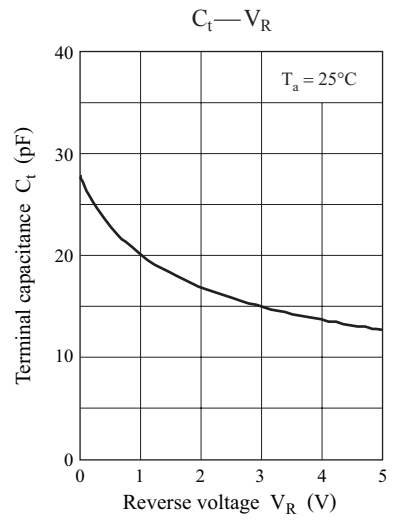
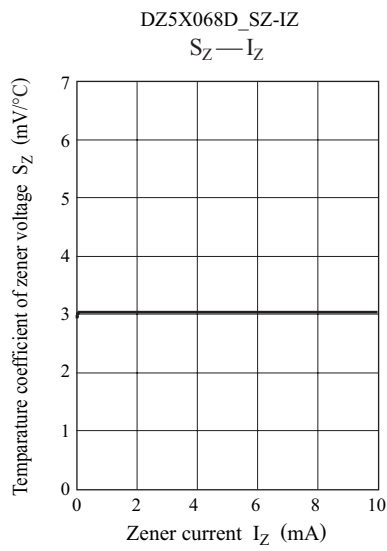
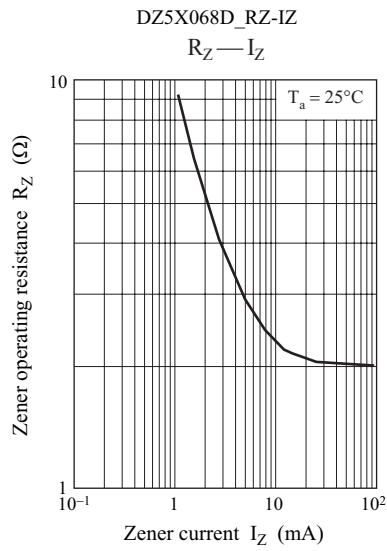
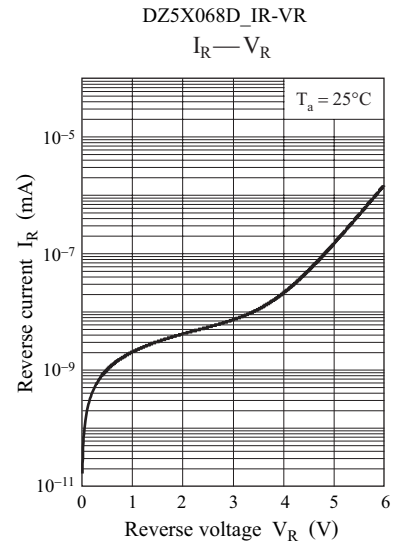
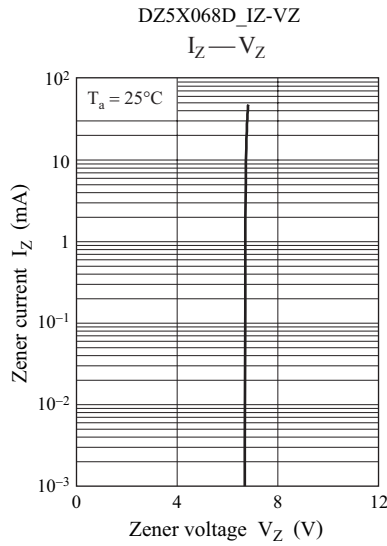
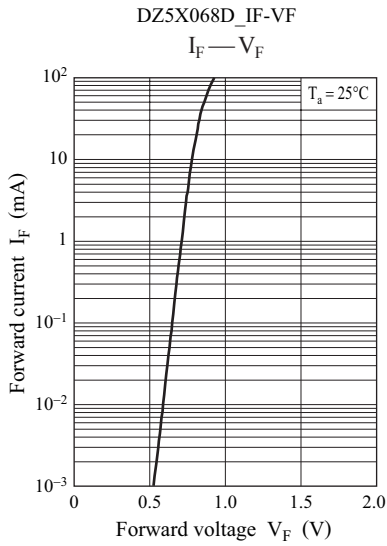
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. \*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.

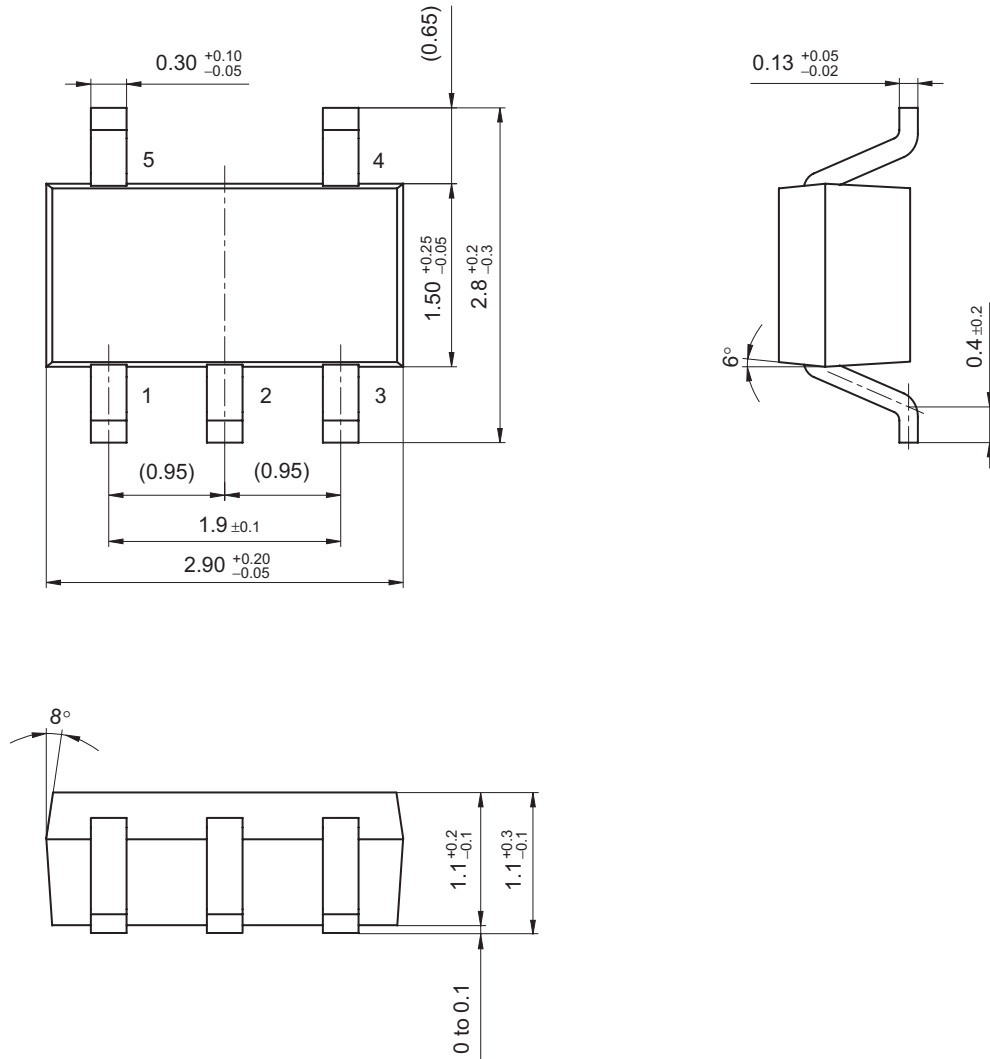
\*3:  $T_j = 25^\circ\text{C}$  to  $150^\circ\text{C}$



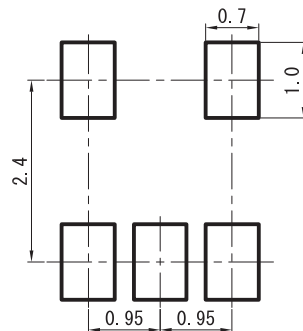


Mini5-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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