

## DZ5J100D0R

### Silicon epitaxial planar type

For surge absorption circuit

DZ5X100D in SMini5 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: 04

#### ■ Basic Part Number :

Dual DZ3X100D (Common anode)

#### ■ Packaging

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

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

Parameter	Symbol	Rating	Unit
Total power dissipation <sup>*1</sup>	PT	200	mW
Electrostatic discharge <sup>*2</sup>	ESD	±10	kV
Junction temperature	$T_j$	150	°C
Operating ambient temperature	$T_{opr}$	-40 to +85	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

Note) \*1: PT = 200 mW achieved with a printed circuit board.

(4Diode total)

\*2: Test method: IEC61000\_4\_2(C = 150 pF, R = 330  $\Omega$ , Contact discharge: 10 times)

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

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	9.50		10.50	V
Zener operating resistance	R <sub>Z</sub>	I <sub>Z</sub> = 5 mA			30	$\Omega$
Zener rise operating resistance	R <sub>ZK</sub>	I <sub>Z</sub> = 0.5 mA			60	$\Omega$
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 7 V			0.05	$\mu\text{A}$
Temperature coefficient of zener voltage <sup>*3</sup>	SZ	I <sub>Z</sub> = 5 mA		6.5		mV/°C

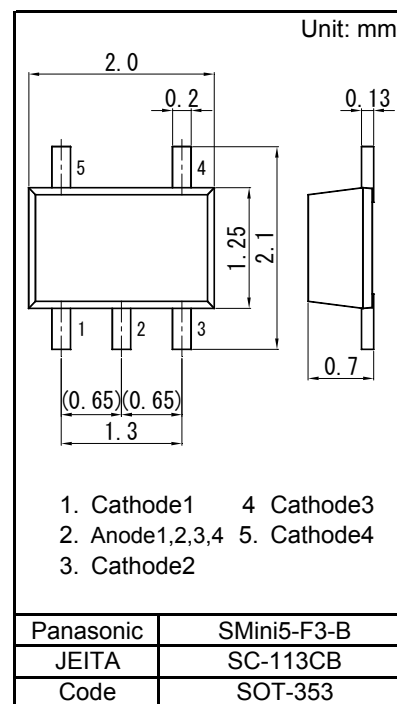
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

2. \*1: The temperature must be controlled 25°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



#### Internal Connection

