



DE37120D0L

Silicon epitaxial planar type

For ESD protection

■ 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:48

■ Packaging

Embossed type (Thermo-compression sealing) 10 000 pcs / reel (standard)

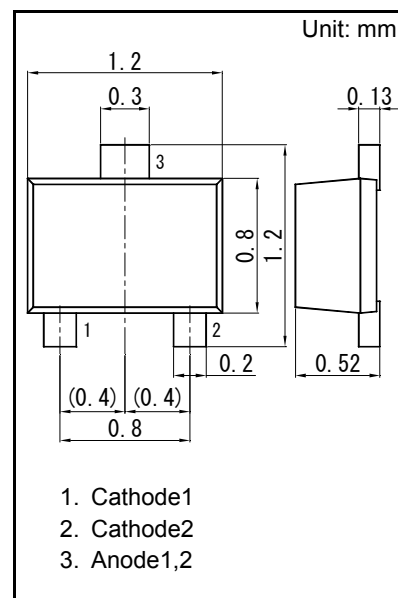
■ Absolute Maximum Ratings $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Rating	Unit
Total power dissipation ^{*1}	PT	150	mW
Electrostatic discharge ^{*2}	ESD	±15	kV
Junction temperature	T_j	150	$^{\circ}\text{C}$
Operating ambient temperature	T_{opr}	-40 to +85	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^{\circ}\text{C}$

Note) *1: PT = 150 mW achieved with a printed circuit board.

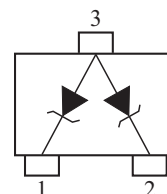
(2 Diode total)

*2: Test method:IEC61000_4_2(C = 150 pF,R = 330 Ω , Contact discharge:10 times)



Panasonic	SSSMini3-F2-B
JEITA	SC-105AA
Code	SOT-723

Internal Connection



■ 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 _F	I _F = 10 mA			1.0	V
Zener voltage ^{*1, *2}	V _Z	I _Z = 5 mA	11.40		12.60	V
Zener operating resistance	R _Z	I _Z = 5 mA			30	Ω
Reverse current	I _R	V _R = 9 V			0.05	μA
Temperature coefficient of zener voltage ^{*3}	SZ	I _Z = 5 mA		8.5		mV/ $^{\circ}\text{C}$

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

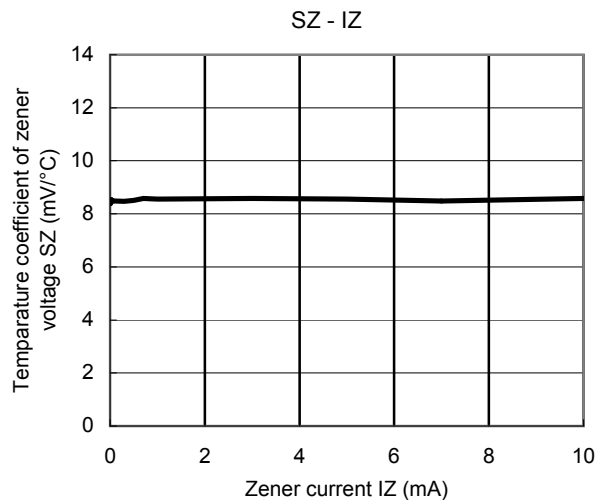
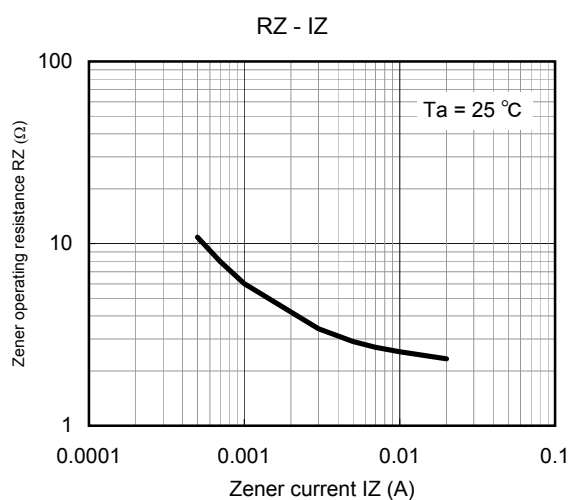
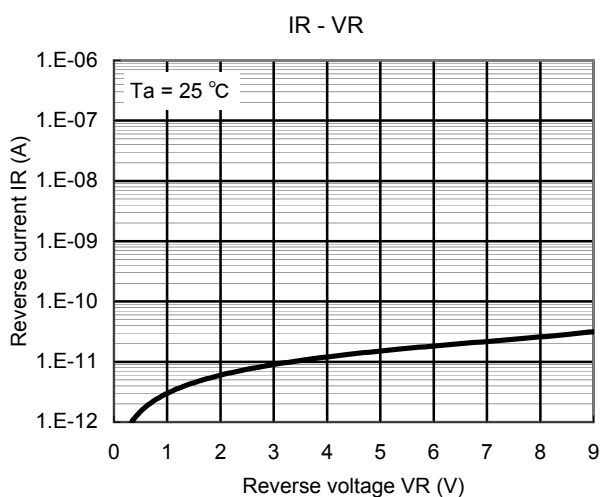
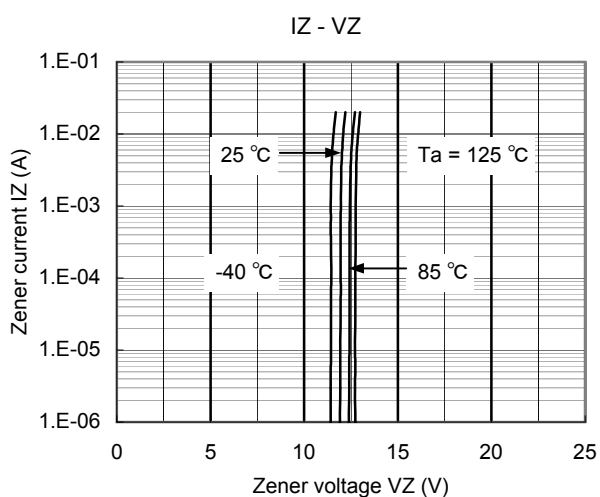
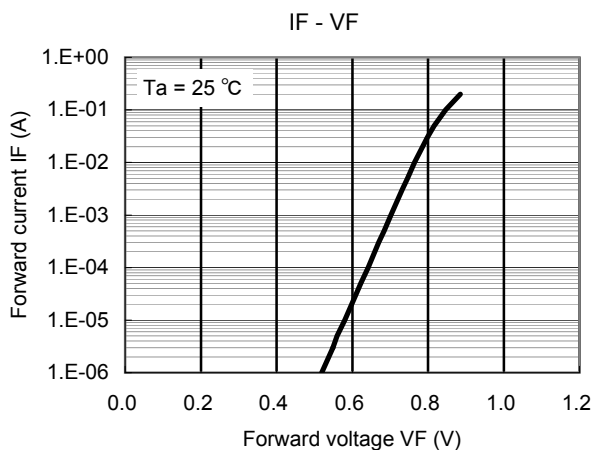
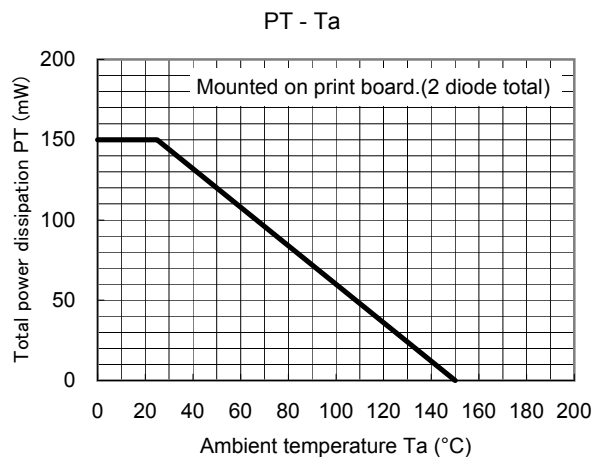
2. *1: The temperature must be controlled 25 $^{\circ}\text{C}$ for V_Z measurement.

V_Z value measured at other temperature must be adjusted to V_Z (25 $^{\circ}\text{C}$)

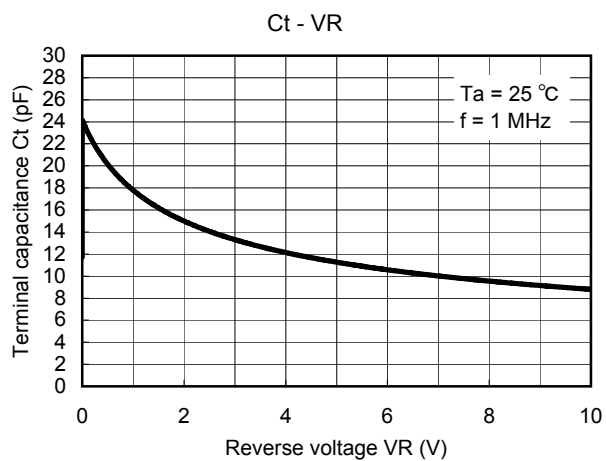
*2: V_Z guaranteed 20 ms after current flow.

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

Technical Data (reference)

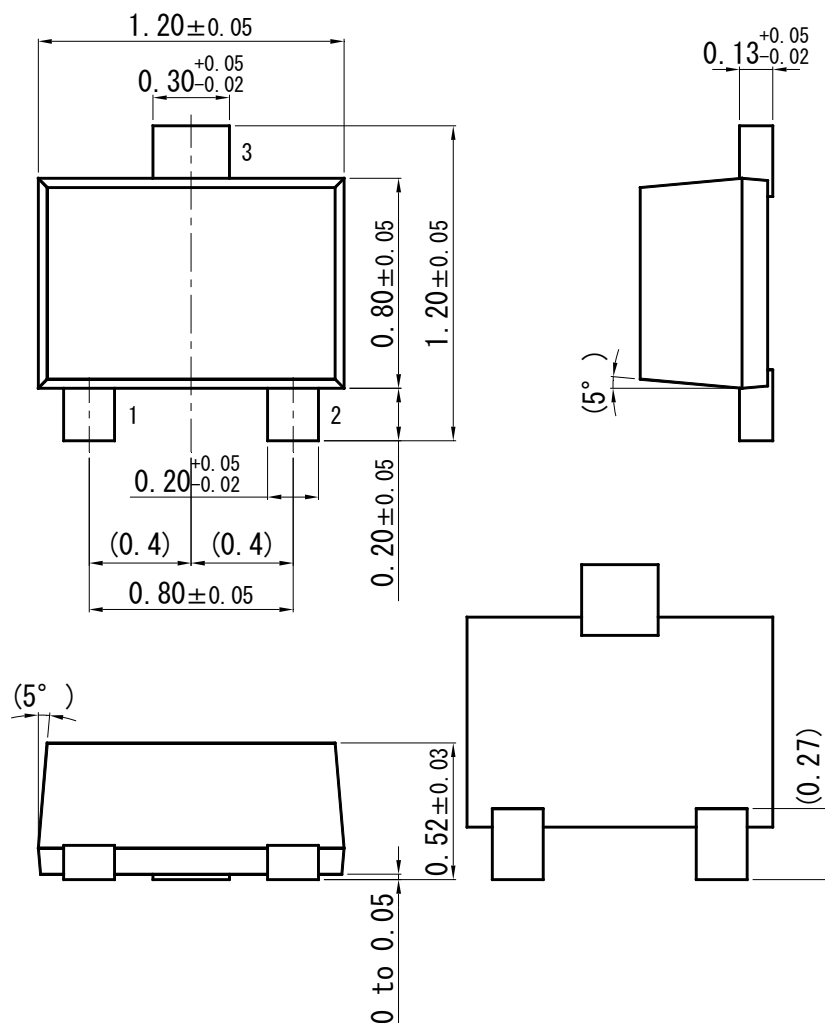


Technical Data (reference)

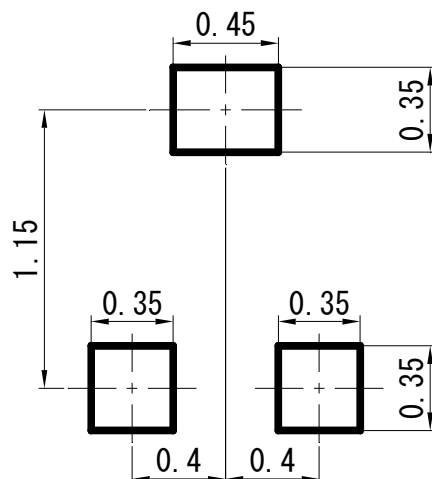


SSSMini3-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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