

DB3J407K

Silicon epitaxial planar type

For high frequency rectification
DB3X407K in SMini3 type package

■ Features

- Short reverse recovery time t_{rr}
- Low forward voltage V_F
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: 3J

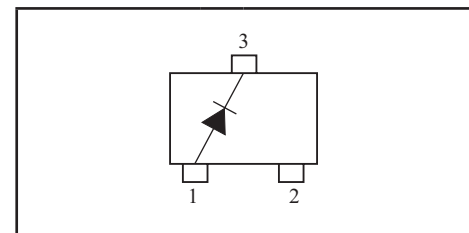
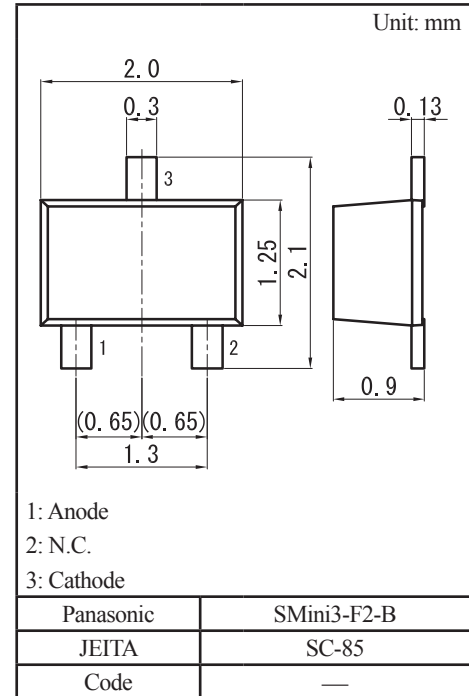
■ Packaging

DB3J407K0L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

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

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	40	V
Repetitive peak reverse voltage	V_{RRM}	40	V
Forward current (Average)	$I_{F(AV)}$	500	mA
Non-repetitive peak forward surge current *1	I_{FSM}	2	A
Junction temperature	T_j	125	$^\circ\text{C}$
Operating ambient temperature	T_{opr}	-40 to +85	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Note) *1: 50 Hz sine wave 1 cycle (Non-repetitive peak current)



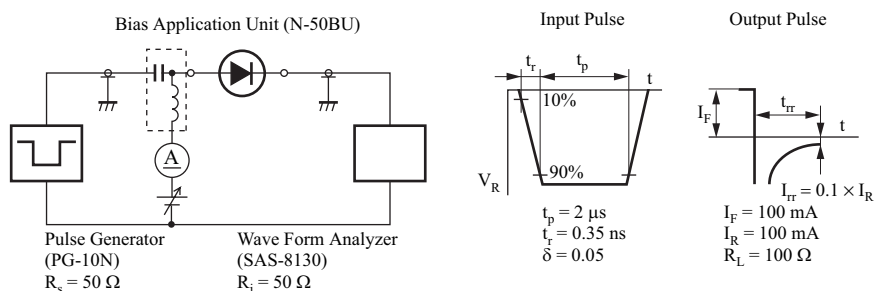
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

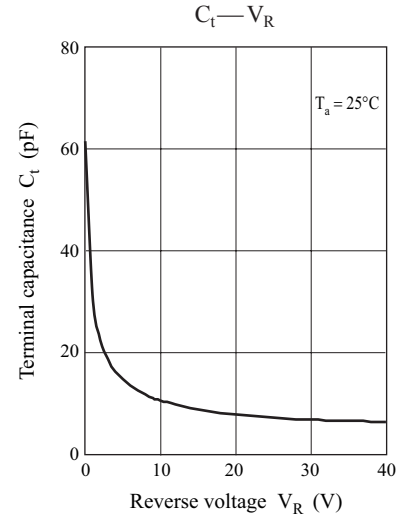
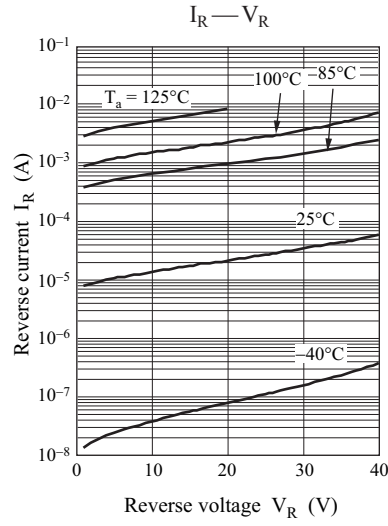
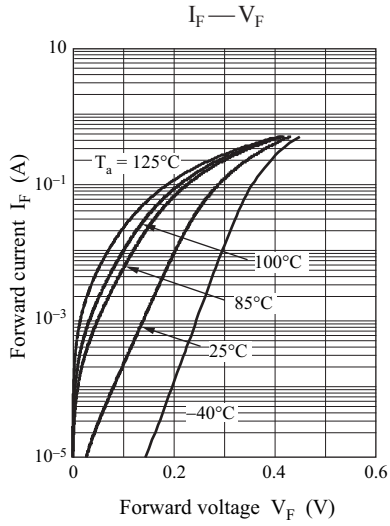
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 500 \text{ mA}$			0.55	V
Reverse current	I_R	$V_R = 35 \text{ V}$			100	μA
Terminal capacitance	C_t	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		12		pF
Reverse recovery time *1	t_{rr}	$I_F = I_R = 100 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$		5		ns

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

2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Absolute frequency of input and output is 400 MHz

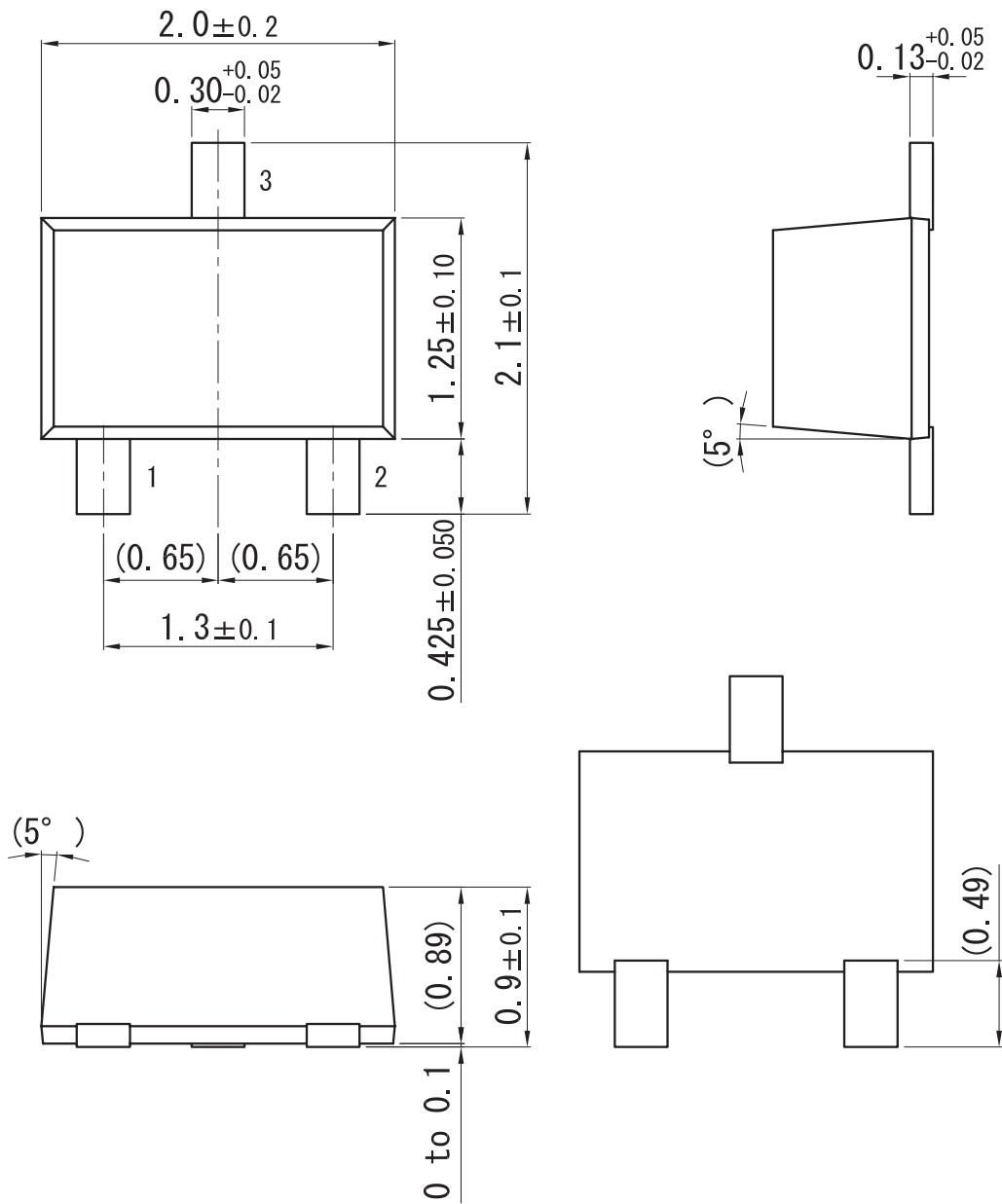
*1: t_{rr} measurement circuit



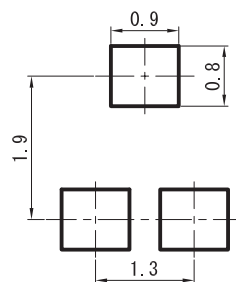


SMini3-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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