

**Panasonic**

## DB3Y501KEL

Silicon epitaxial planar type

For high speed switching circuits  
DB3X501K in NMini3 type package

### ■ Features

- Short reverse recovery time  $t_{rr}$
- Low terminal capacitance  $C_t$
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

### ■ Marking Symbol :4H

### ■ 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
Reverse voltage	VR	50	V
Repetitive peak reverse voltage	VRRM	50	V
Forward current (Average)	IF (AV)	200	mA
Peak forward current	IFM	300	mA
Non-repetitive peak forward surge current *1	IFSM	1	A
Junction temperature	Tj	125	$^{\circ}\text{C}$
Operating ambient temperature	Topr	-40 to +85	$^{\circ}\text{C}$
Storage temperature	Tstg	-55 to +125	$^{\circ}\text{C}$

Note) \*1 The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

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

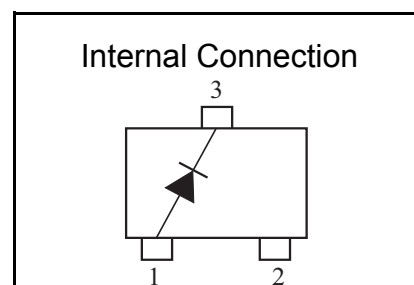
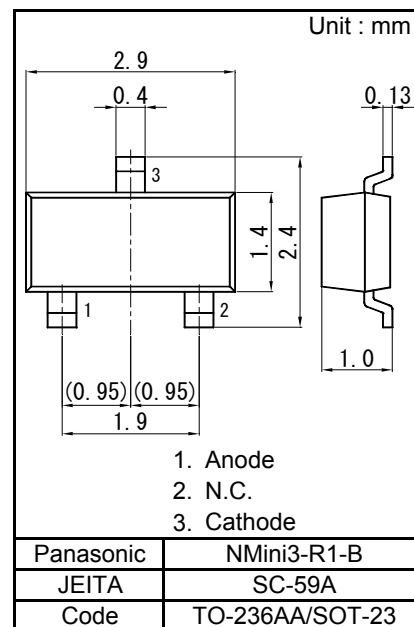
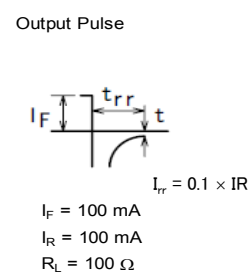
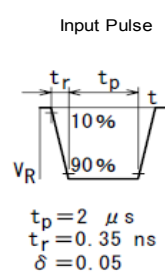
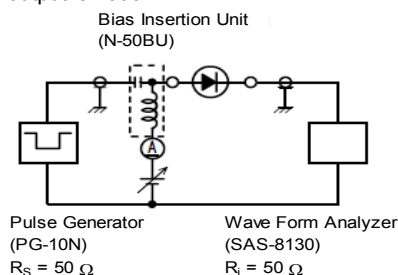
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	VF1	IF = 30 mA			0.36	V
	VF2	IF = 200 mA			0.55	V
Reverse current	IR	VR = 50 V			200	$\mu\text{A}$
Terminal capacitance	Ct	VR = 10 V, f = 1 MHz		4.0		pF
Reverse recovery time *1	t <sub>rr</sub>	IF = IR = 100 mA, I <sub>rr</sub> = 0.1 × IR RL = 100 $\Omega$		1.6		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.

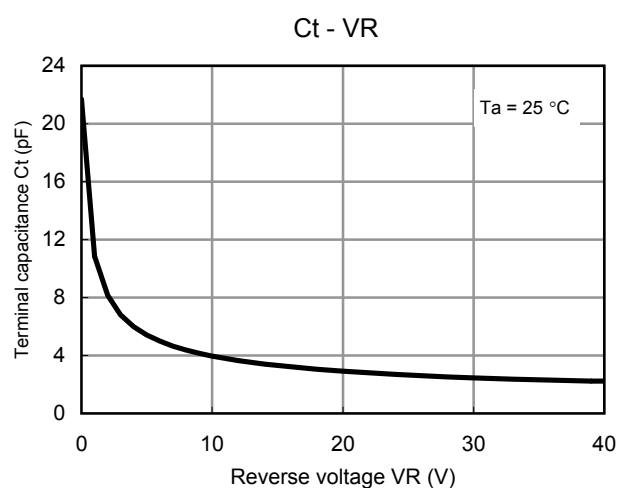
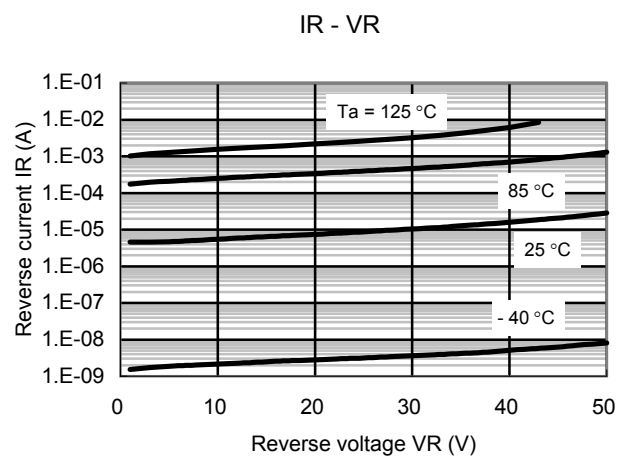
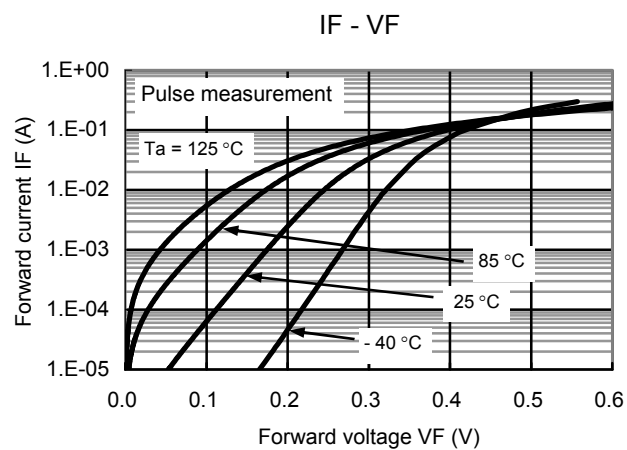
3. Absolute frequency of input and output is 1000 MHz.

4. \*1 t<sub>rr</sub> measurement circuit





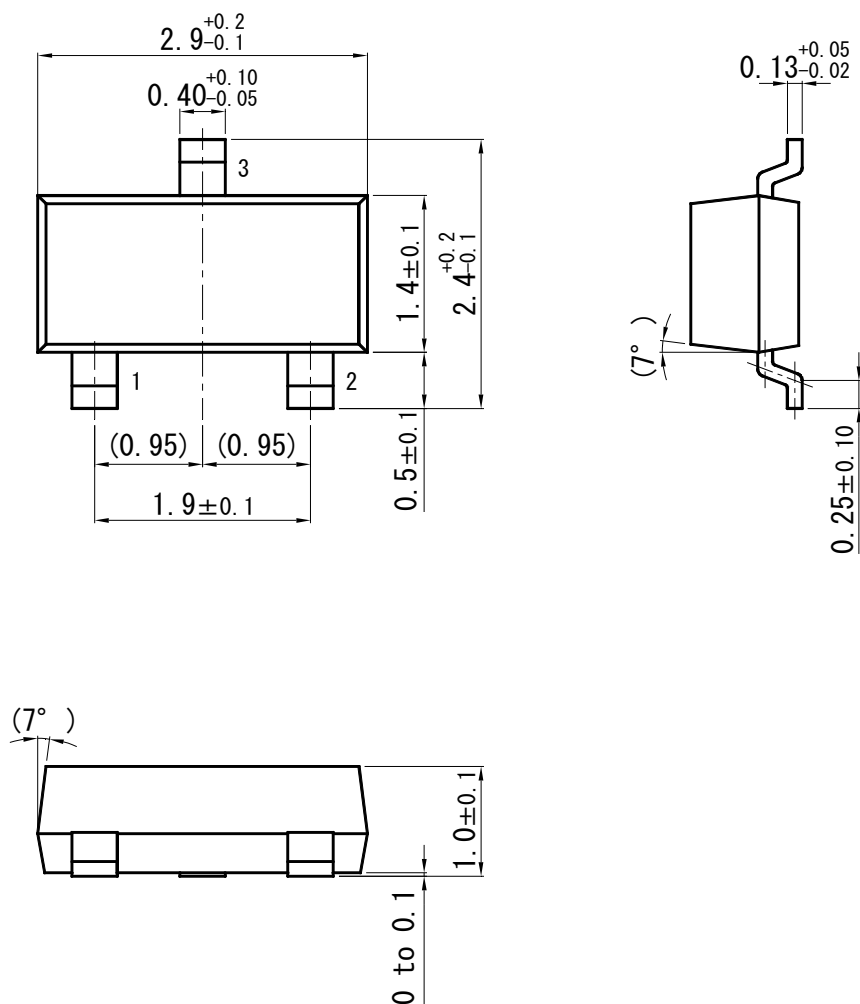
## Technical Data ( reference )



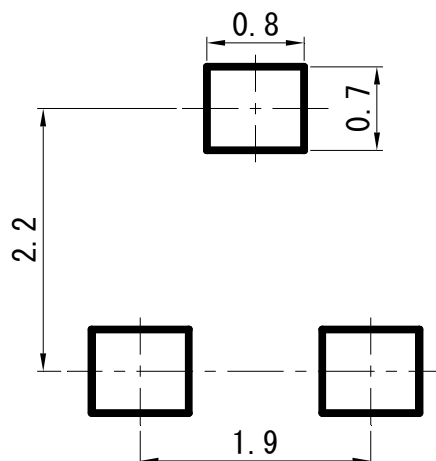
**Panasonic**

NMini3-R1-B

Unit : mm



■ Land Pattern (Reference) (Unit : mm)



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