



Schottky Barrier Diode  
DB3X317K0L

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### Silicon epitaxial planar type

For high frequency rectification

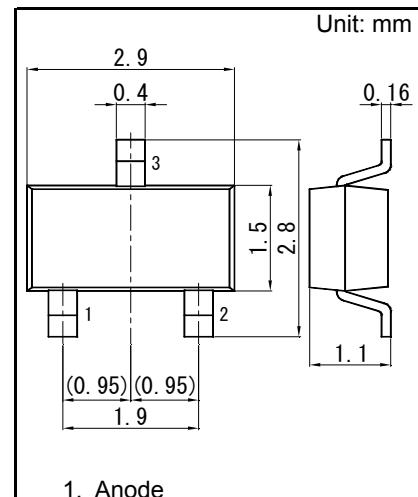
#### ■ Features

- Low forward voltage VF
- Forward current (Average) IF(AV) = 1 A rectification is possible
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

#### ■ Marking Symbol: 5R

#### ■ Packaging

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



1. Anode
2. N.C
3. Cathode

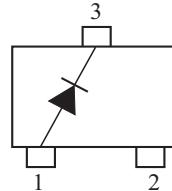
Panasonic	Mini3-G3-B
JEITA	SC-59A
Code	TO-236AA/SOT-23

#### ■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Reverse voltage	VR	30	V
Repetitive peak reverse voltage	VRRM	30	V
Forward current (Average)	IF(AV)	1	A
Non-repetitive peak forward surge current <sup>*1</sup>	IFSM	5	A
Junction temperature	T <sub>j</sub>	125	°C
Operating ambient temperature	T <sub>opr</sub>	-40 to +85	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C

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

#### Internal Connection





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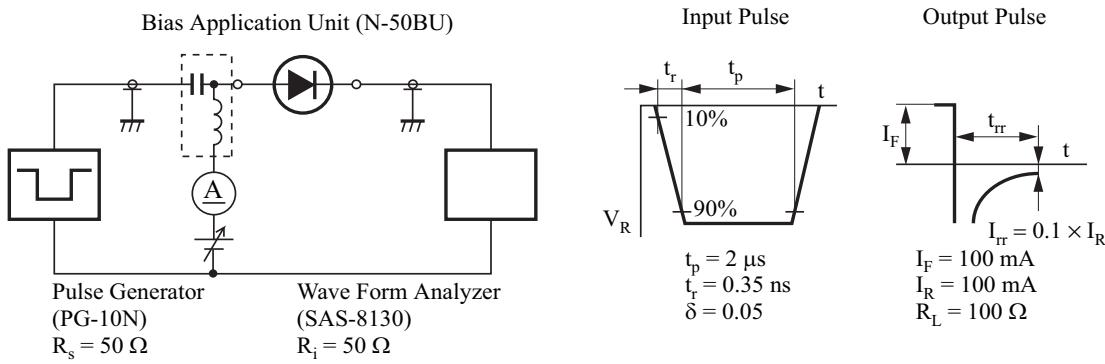
■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	VF1	IF = 700 mA		0.41	0.48	V
	VF2	IF = 1 A		0.46	0.52	V
Reverse current	IR	VR = 30 V	10	100	100	$\mu\text{A}$
Terminal capacitance	C <sub>t</sub>	VR = 10 V, f = 1 MHz	22			pF
Reverse recovery time <sup>1</sup>	t <sub>rr</sub>	IF = IR = 100 mA I <sub>rr</sub> = 0.1 × IR, RL = 100 $\Omega$		7.8		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.

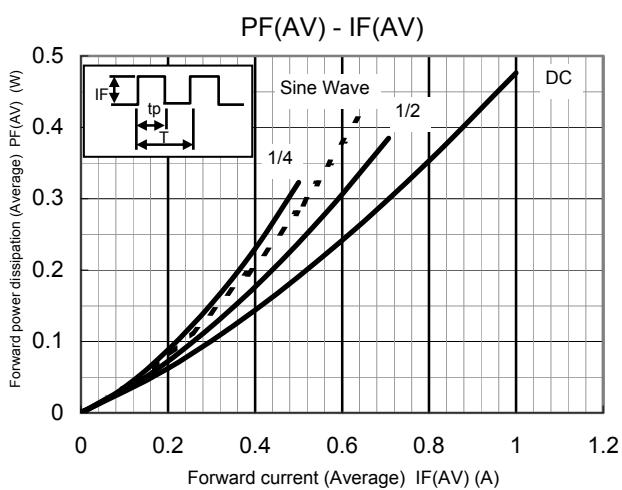
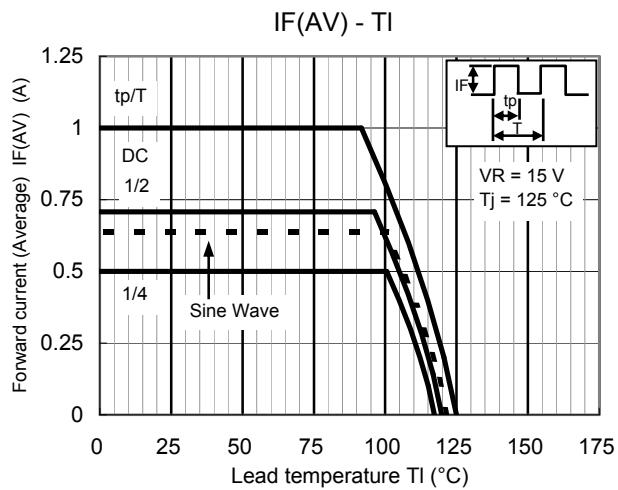
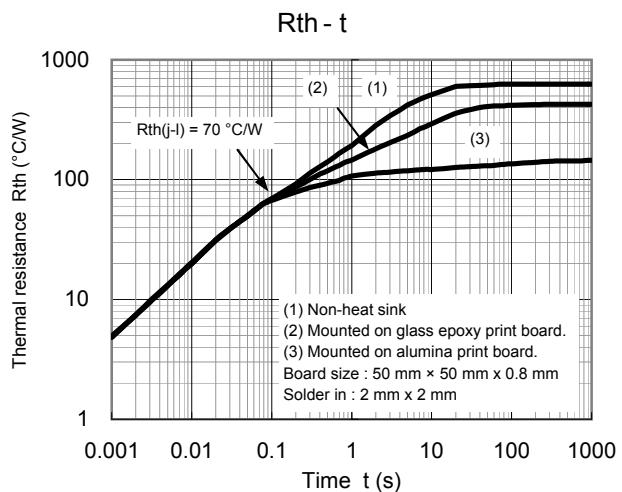
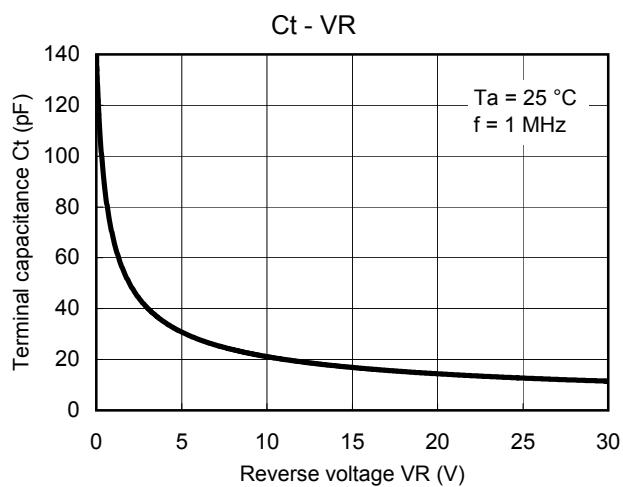
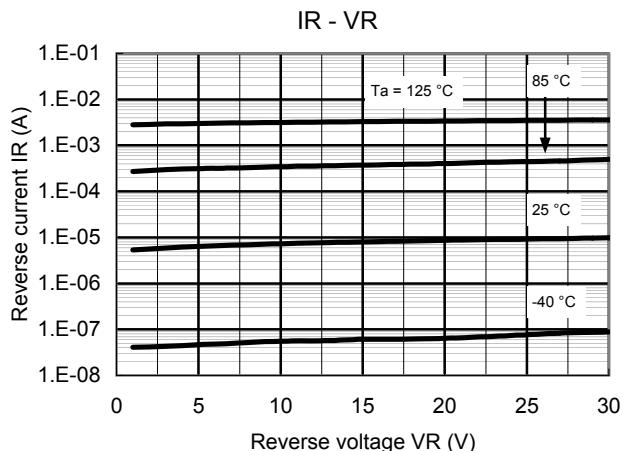
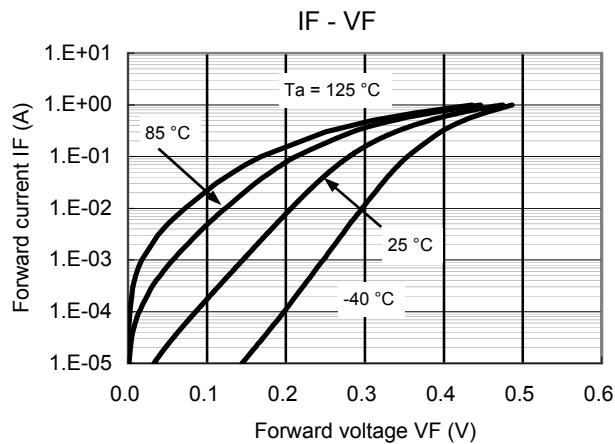
3. \*1 t<sub>rr</sub> test circuit





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Technical Data ( reference )

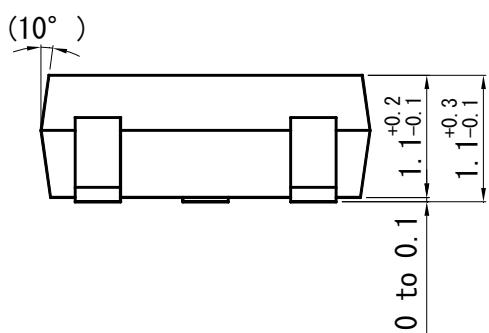
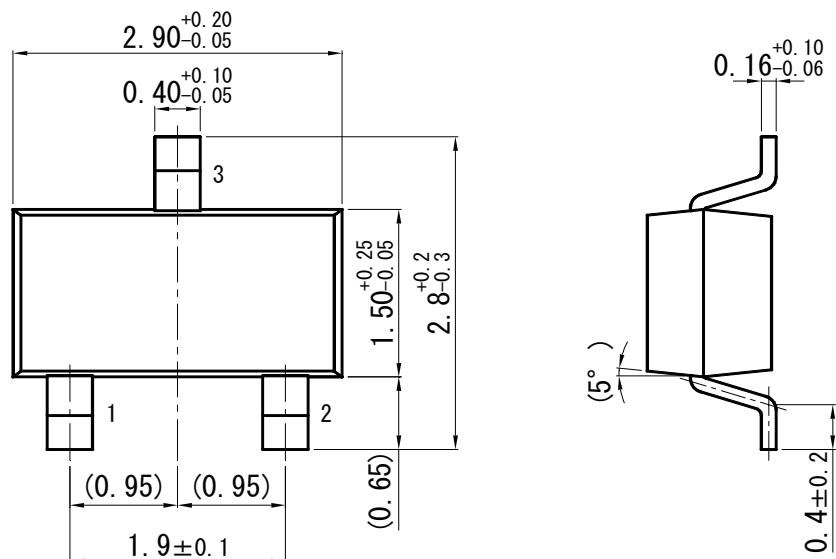


**Panasonic**

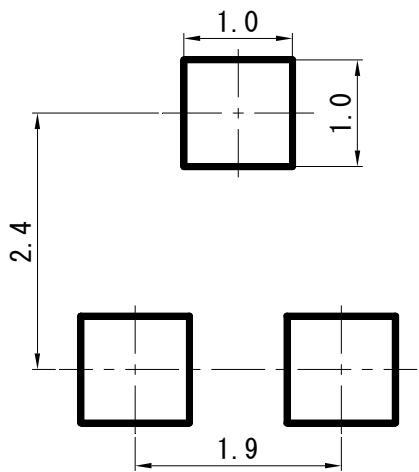
Schottky Barrier Diode  
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**Mini3-G3-B**

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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