



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 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 $T_a = 25\text{ }^\circ\text{C}$

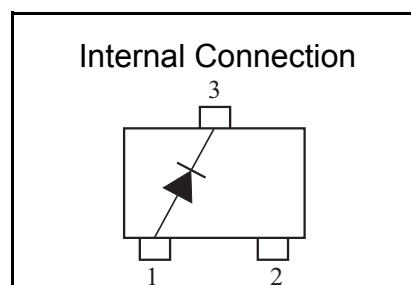
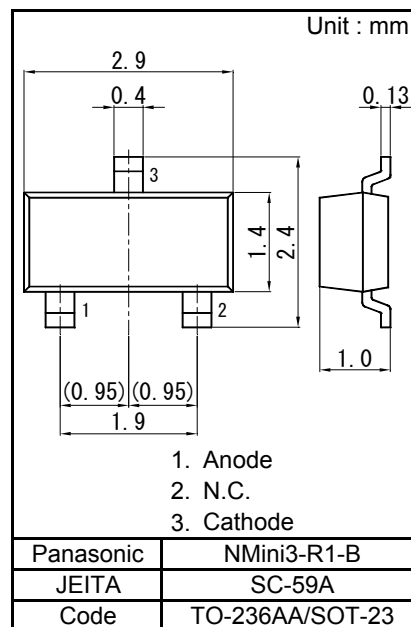
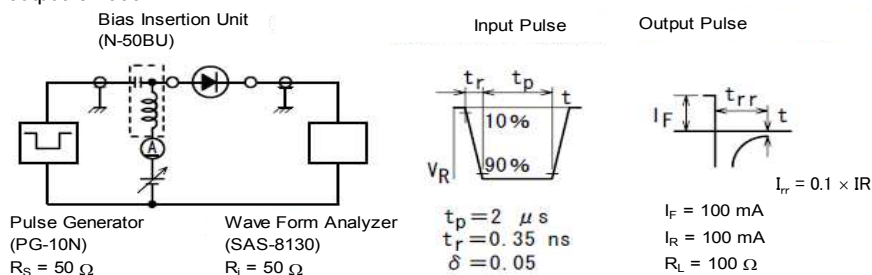
Parameter	Symbol	Rating	Unit
Reverse voltage	VR	50	V
Repetitive peak reverse voltage	VRRM	50	V
Forward current (Average)	IF (AV)	200	mA
Peak forward current	IFM	300	mA
Non-repetitive peak forward surge current *1	IFSM	1	A
Junction temperature	Tj	125	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +125	°C

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

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

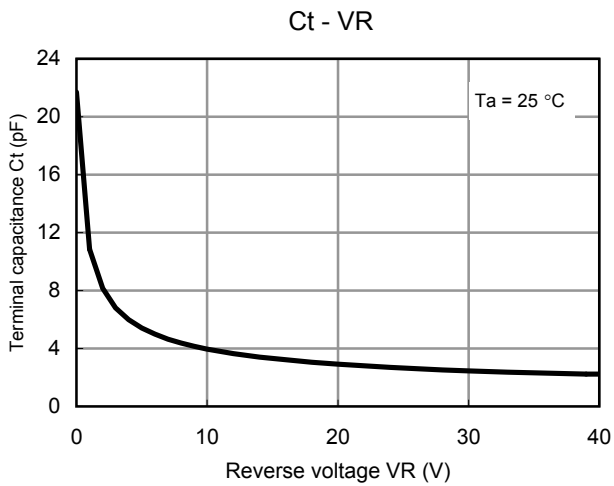
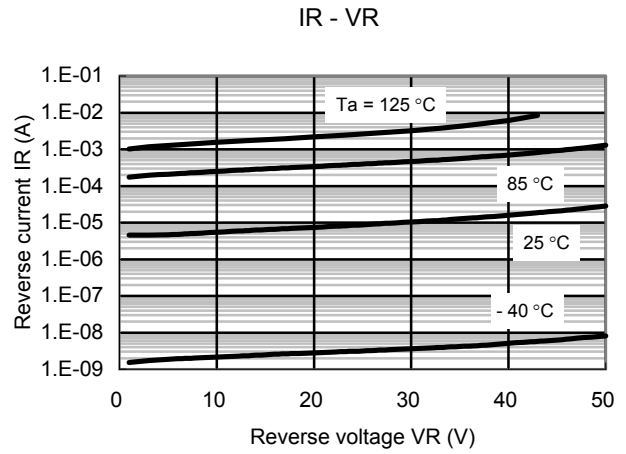
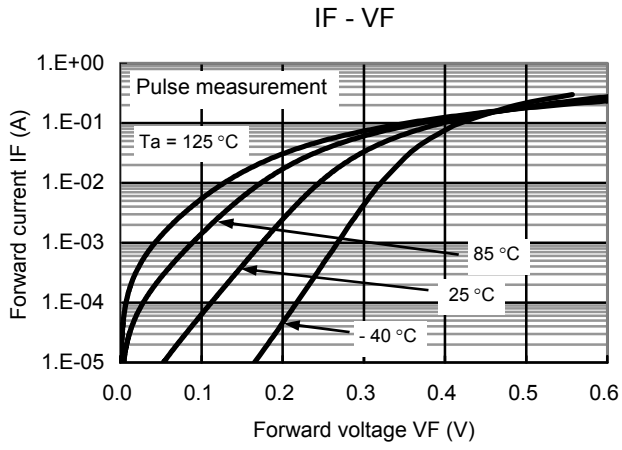
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	VF1	IF = 30 mA			0.36	V
	VF2	IF = 200 mA			0.55	V
Reverse current	IR	VR = 50 V			200	μA
Terminal capacitance	Ct	VR = 10 V, f = 1 MHz		4.0		pF
Reverse recovery time *1	t <sub>rr</sub>	IF = IR = 100 mA, I <sub>rr</sub> = 0.1 × IR RL = 100 Ω	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





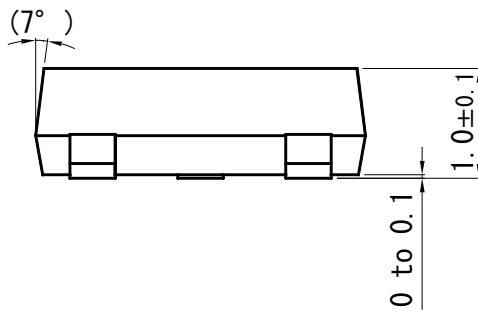
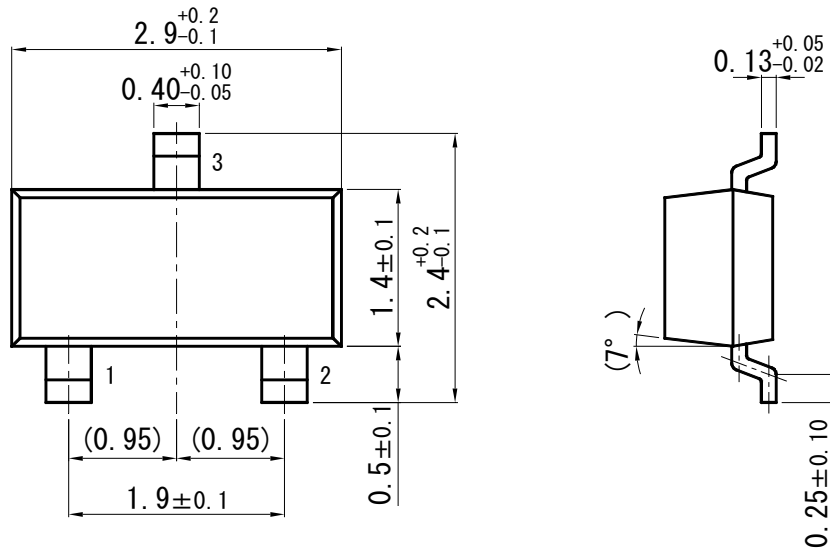
Technical Data ( reference )



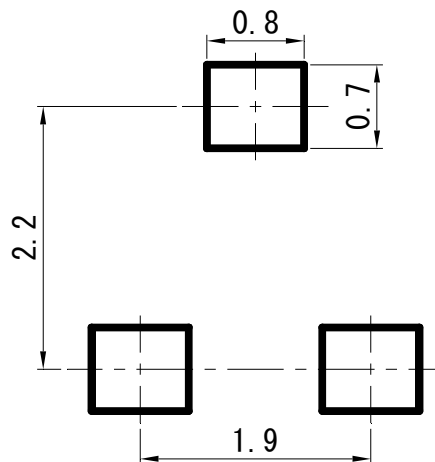


### NMini3-R1-B

Unit : mm



#### ■ Land Pattern (Reference) (Unit : mm)



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