



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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# DB3X313F

## Silicon epitaxial planar type

For small current rectification

### ■ Features

- Low forward voltage  $V_F$  and small reverse current  $I_R$
- Low terminal capacitance  $C_t$
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

### ■ Marking Symbol: 4Q

### ■ Basic Part Number

Dual DB2J313 (Series)

### ■ Packaging

DB3X313F0L 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	$V_R$	30	V
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Forward current (Average)	Single	200	mA
	Series	130	
Peak forward current	Single	300	mA
	Series	220	
Non-repetitive peak reverse surge voltage *1	Single	1.0	A
	Series	0.7	
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 $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

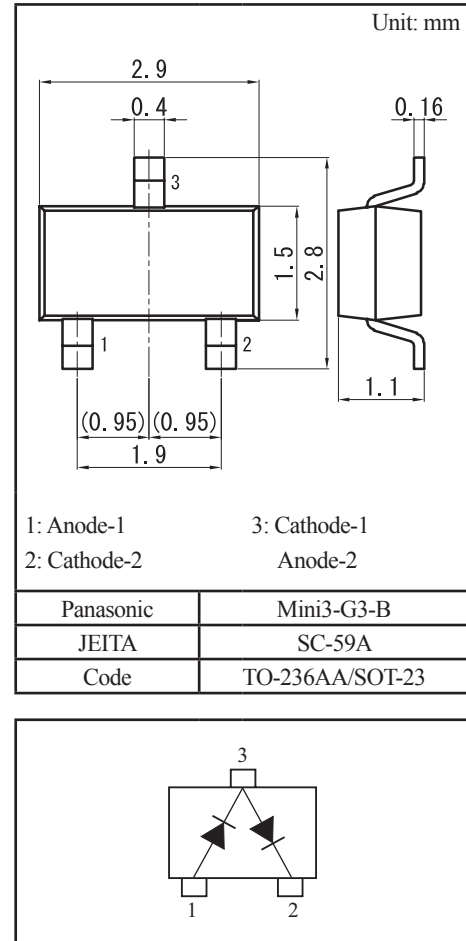
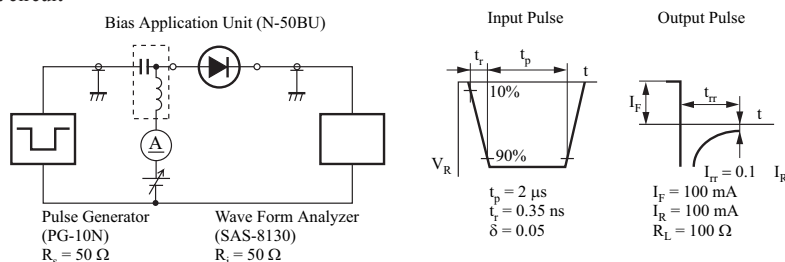
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 200 \text{ mA}$			0.55	V
Reverse current	$I_R$	$V_R = 30 \text{ V}$			50	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		3.8		pF
Reverse recovery time *1	$t_{rr}$	$I_F = I_R = 100 \text{ mA}, I_{tr} = 0.1 \times I_R, R_L = 100 \Omega$		1.5		ns

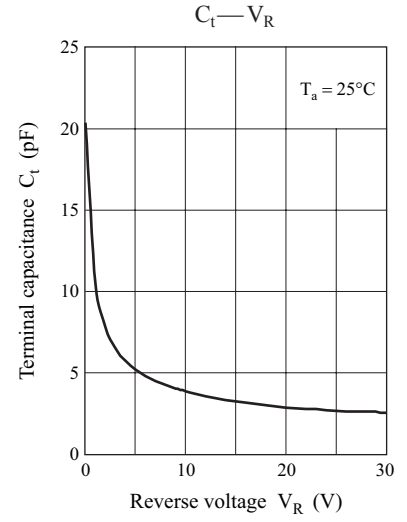
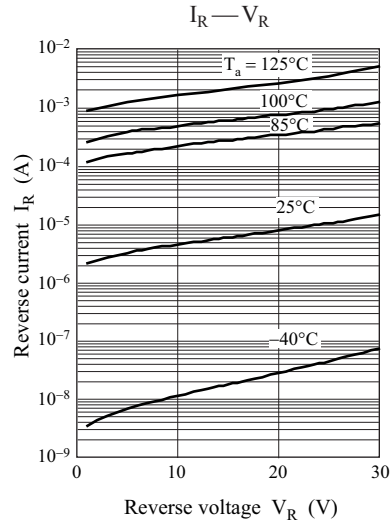
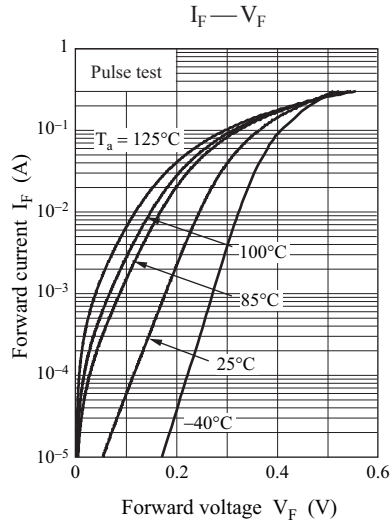
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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 1 GHz

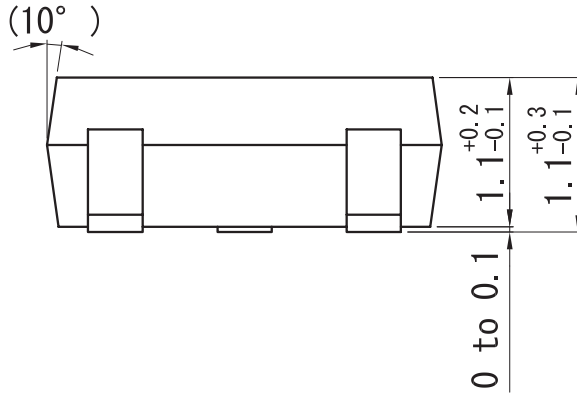
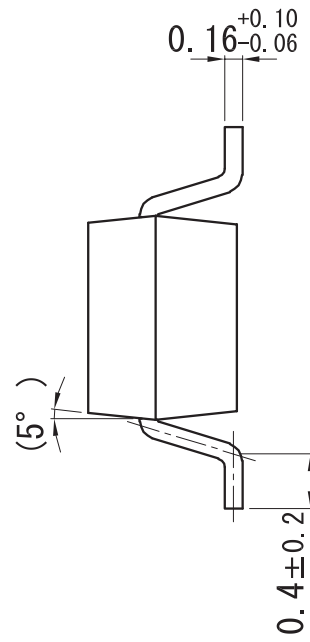
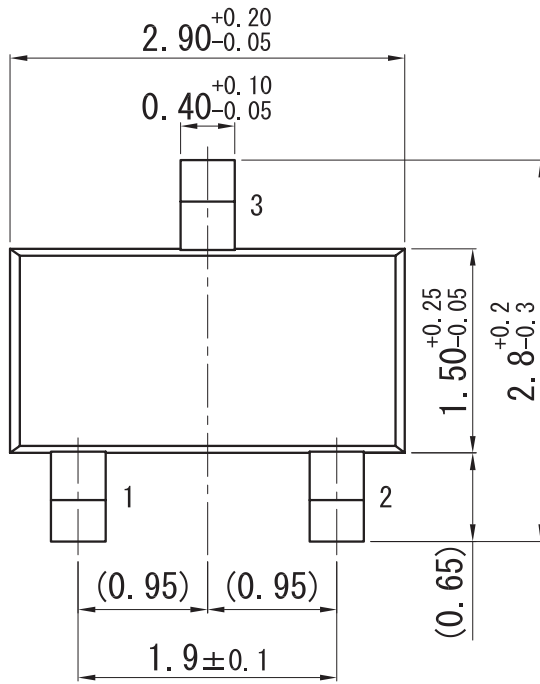
\*1:  $t_{rr}$  measurement circuit



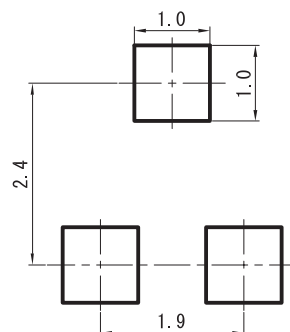


Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)





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