# DB3X313F

## Silicon epitaxial planar type

#### For small current rectification

#### Features

- $\bullet$  Low forward voltage  $V_{\text{F}}$  and small reverse current  $I_{\text{R}}$
- Low terminal capacitance C<sub>t</sub>
- Halogen-free / RoHS compliant
- (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

#### Marking Symbol: 4Q

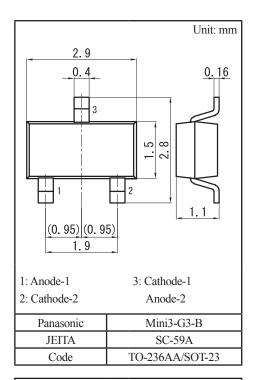
#### Basic Part Number

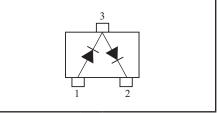
Dual DB2J313 (Series)

#### Packaging

DB3X313F0L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

#### Absolute Maximum Ratings $T_a = 25^{\circ}C$ Parameter Symbol Rating Unit Reverse voltage V<sub>R</sub> 30 V V Repetitive peak reverse voltage 30 V<sub>RRM</sub> Single 200 Forward current (Average) mА I<sub>F(AV)</sub> Series 130 Single 300 Peak forward current $\mathrm{I}_{\mathrm{FM}}$ mА Series 220 1.0 Single Non-repetitive peak reverse А $I_{FSM}$ surge voltage \*1 0.7 Series Junction temperature Ti 125 °C Operating ambient temperature -40 to +85 °C Topr Storage temperature -55 to +125 °C T<sub>stg</sub>





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

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

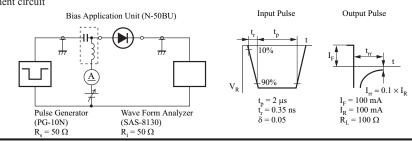
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F</sub>	$I_F = 200 \text{ mA}$			0.55	V
Reverse current	I <sub>R</sub>	$V_R = 30 V$			50	μΑ
Terminal capacitance	Ct	$V_{R} = 10 V, f = 1 MHz$		3.8		pF
Reverse recovery time *1	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$		1.5		ns

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

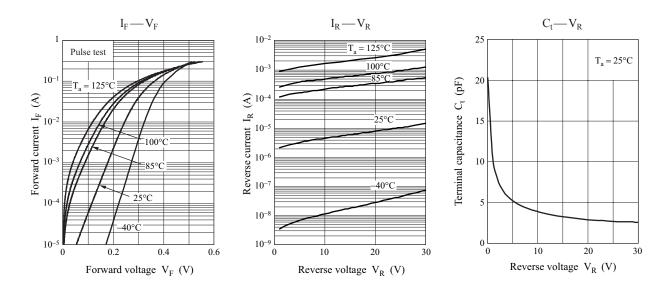
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 1 GHz

\*1: trr measurement circuit

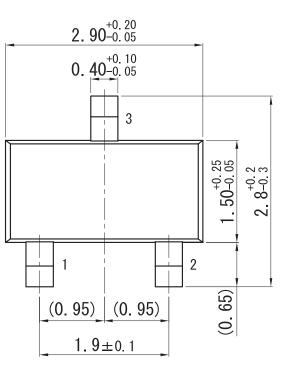


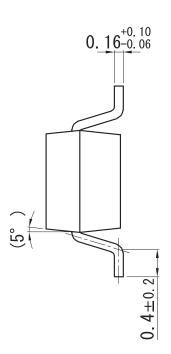
Publication date: May 2013

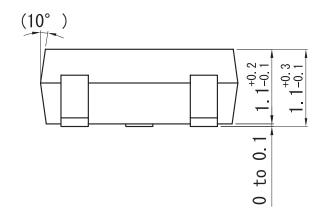


Unit: mm

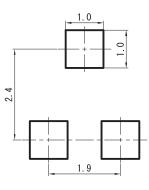
# Mini3-G3-B







Land Pattern (Reference) (Unit: mm)





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