DB3X313F

Silicon epitaxial planar type

For small current rectification

Features

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

Marking Symbol: 4Q

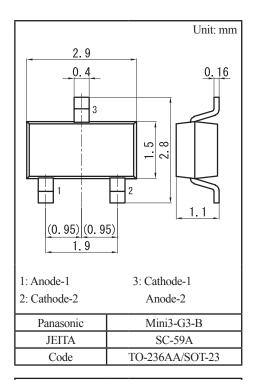
Basic Part Number

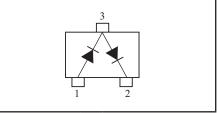
Dual DB2J313 (Series)

Packaging

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

Absolute Maximum Ratings $T_a = 25^{\circ}C$ Unit Parameter Symbol Rating Reverse voltage V_R 30 V V Repetitive peak reverse voltage 30 V_{RRM} Single 200 Forward current (Average) mА I_{F(AV)} Series 130 Single 300 Peak forward current I_{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_{stg}





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

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

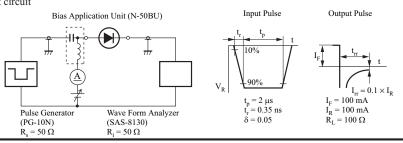
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V _F	$I_F = 200 \text{ mA}$			0.55	V
Reverse current	I _R	$V_R = 30 V$			50	μΑ
Terminal capacitance	Ct	$V_{R} = 10 V, f = 1 MHz$		3.8		pF
Reverse recovery time *1	t _{rr}	$I_F = I_R = 100 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$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

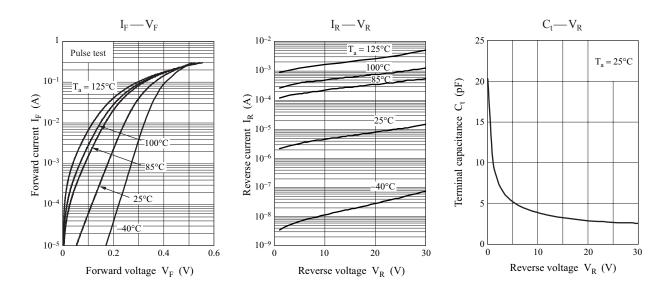
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

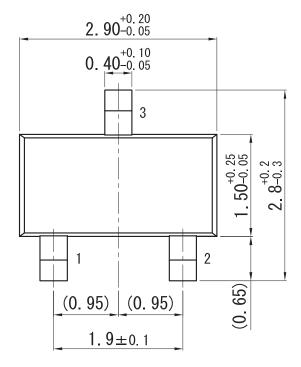
*1: t_{rr} measurement circuit

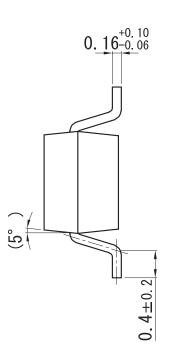


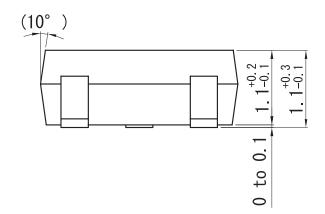


Unit: mm

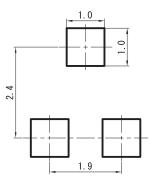
Mini3-G3-B







Land Pattern (Reference) (Unit: mm)



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(6) Comply with the instructions for use in order to prevent breakdown and characteristics change due to external factors (ESD, EOS, thermal stress and mechanical stress) at the time of handling, mounting or at customer's process. When using products for which damp-proof packing is required, satisfy the conditions, such as shelf life and the elapsed time since first opening the packages.

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