DB2X201

Silicon epitaxial planar type

For high frequency rectification
DB3X201K in Mini2 type package

■ Features

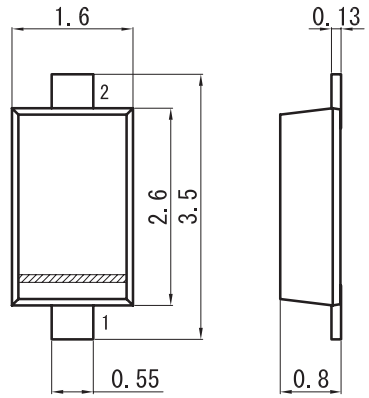
- Small reverse current I_R
- Low forward voltage V_F
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: B2

■ Packaging

DB2X20100L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

Unit: mm



1: Cathode
2: Anode

Panasonic	Mini2-F4-B
JEITA	SC-109D
Code	SOD-123

■ Absolute Maximum Ratings $T_a = 25°C$

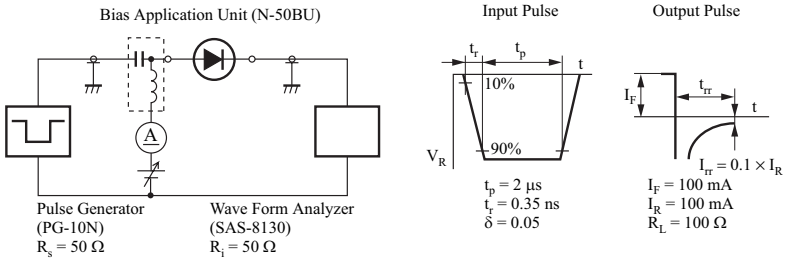
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	20	V
Repetitive peak reverse voltage	V_{RRM}	20	V
Forward current (Average)	$I_{F(AV)}$	500	mA
Non-repetitive peak forward surge current *1	I_{FSM}	3	A
Junction temperature	T_j	125	°C
Operating ambient temperature	T_{opr}	–40 to +85	°C
Storage temperature	T_{stg}	–55 to +125	°C

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

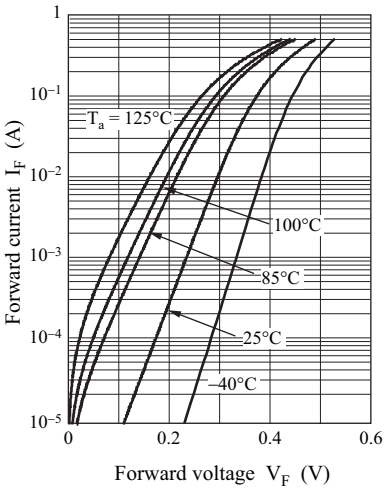
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	I_F = 10 mA			0.4	V
	V_{F2}	I_F = 500 mA			0.55	
Reverse current	I_{R1}	V_R = 5 V			1	μA
	I_{R2}	V_R = 10 V			10	
Terminal capacitance	C_t	V_R = 10 V, f = 1 MHz		12		pF
Reverse recovery time *1	t_{rr}	$I_F = I_R$ = 100 mA, $I_{rr} = 0.1 \times I_R$, R_L = 100 Ω		4.3		ns

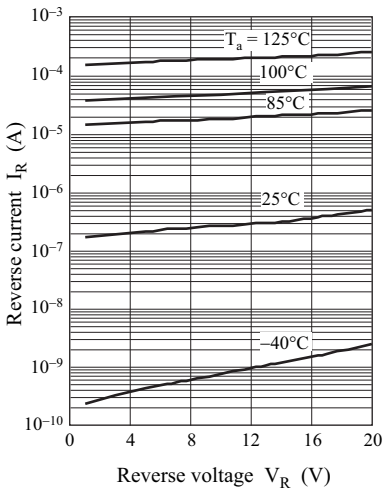
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Absolute frequency of input and output is 400 MHz
4. *1: t_{rr} measurement circuit



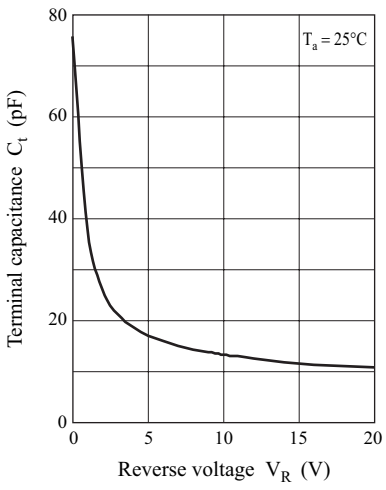
I_F — V_F



I_R — V_R

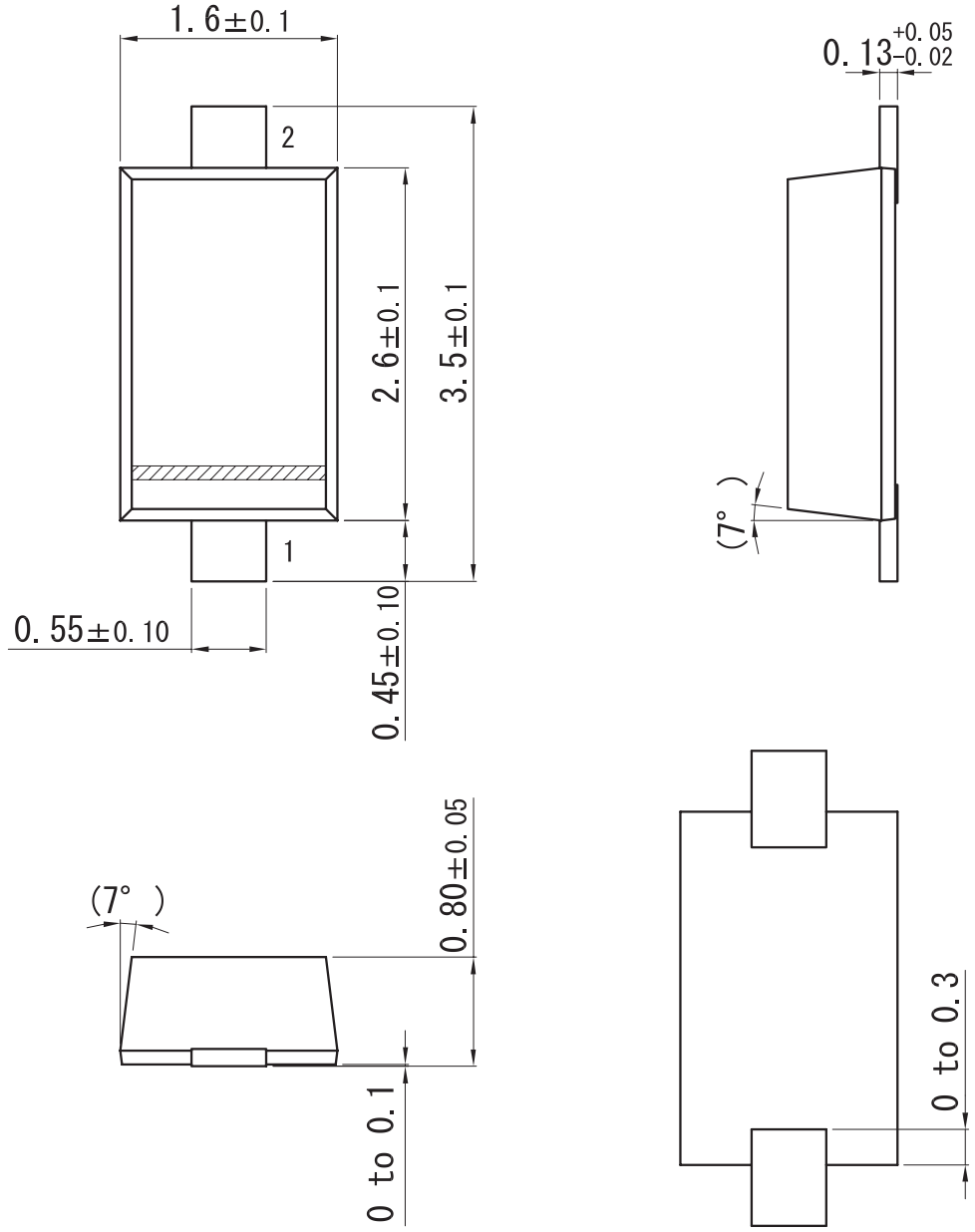


C_t — V_R

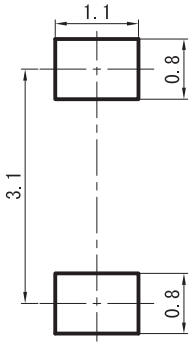


Mini2-F4-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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