DB3X207K

Silicon epitaxial planar type

For high frequency amplification

■ Features

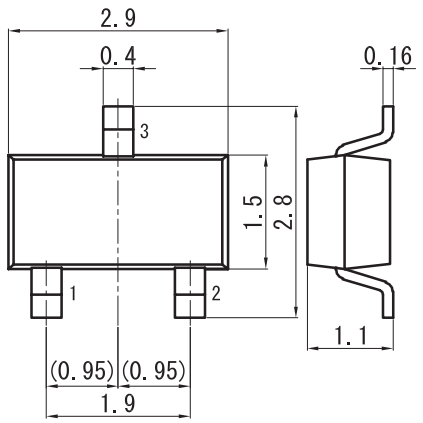
- Low forward voltage V_F
- Forward current (Average) $I_{F(AV)}$ = 1 A rectification is possible
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: 3F

■ Packaging

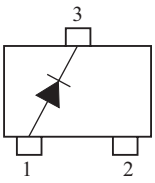
DB3X207K0L Embossed type (Thermo-compression sealing): 3000 pcs / reel (standard)

Unit: mm



1: Anode
2: N.C.
3: Cathode

Panasonic	Mini3-G3-B
JEITA	SC-59A
Code	TO-236AA/SOT-23



■ Absolute Maximum Ratings T_a = 25°C

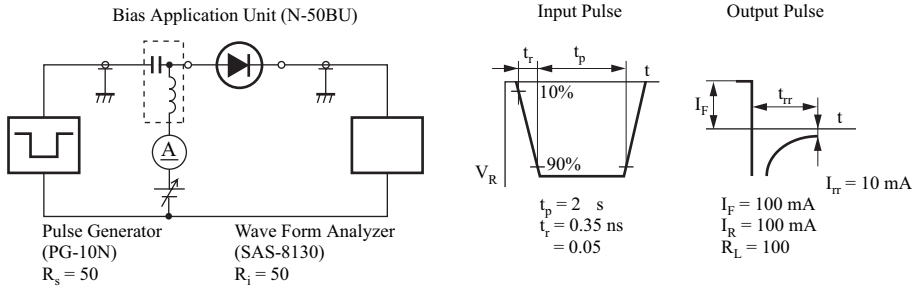
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	20	V
Repetitive peak reverse voltage	V_{RRM}	20	V
Forward current (Average) *1	$I_{F(AV)}$	1	A
Non-repetitive peak forward surge current *2	I_{FSM}	3	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	–55 to +125	°C

Note) *1: Mounted on an alumina PC board
*2: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

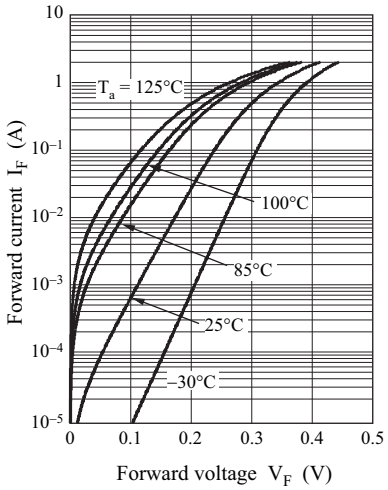
■ Electrical Characteristics T_a = 25°C±3°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	I_F = 1.0 A			0.4	V
Reverse current	I_R	V_R = 6 V			1.5	mA
Terminal capacitance	C_t	V_R = 10 V, f = 1 MHz		43		pF
Reverse recovery time *1	t_{rr}	I_F = I_R = 100 mA, I_{rr} = 10 mA, R_L = 100 Ω		12		ns

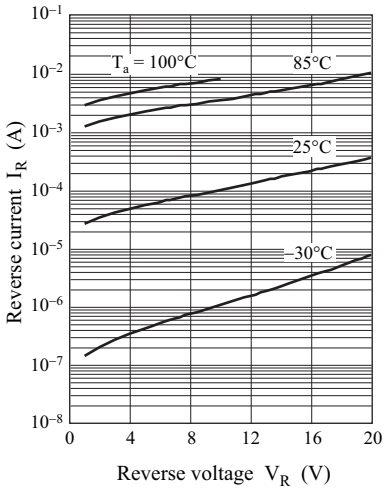
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3.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



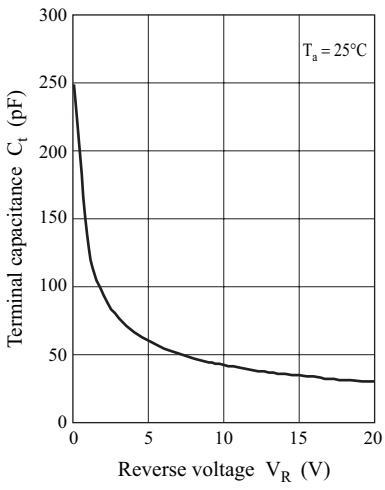
I_F — V_F



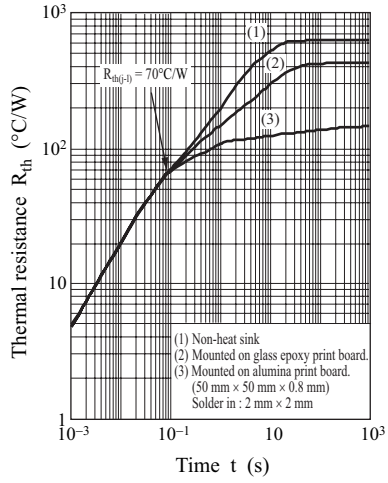
I_R — V_R



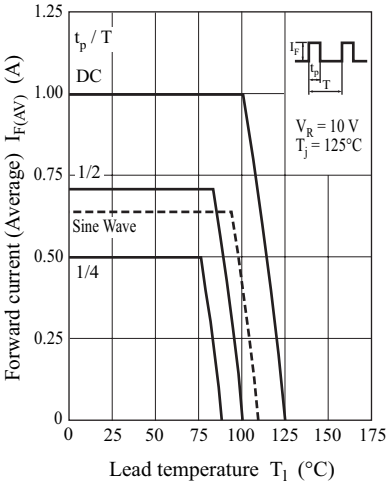
C_t — V_R



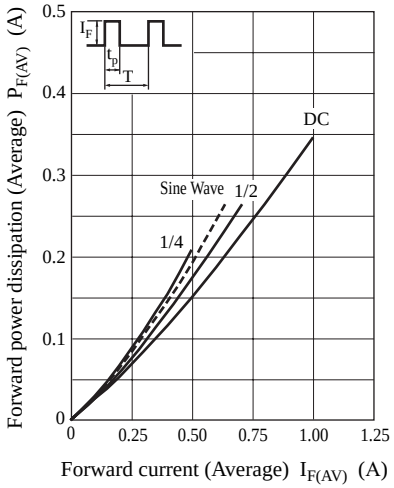
R_{th} — t



$I_{F(AV)}$ — T_l

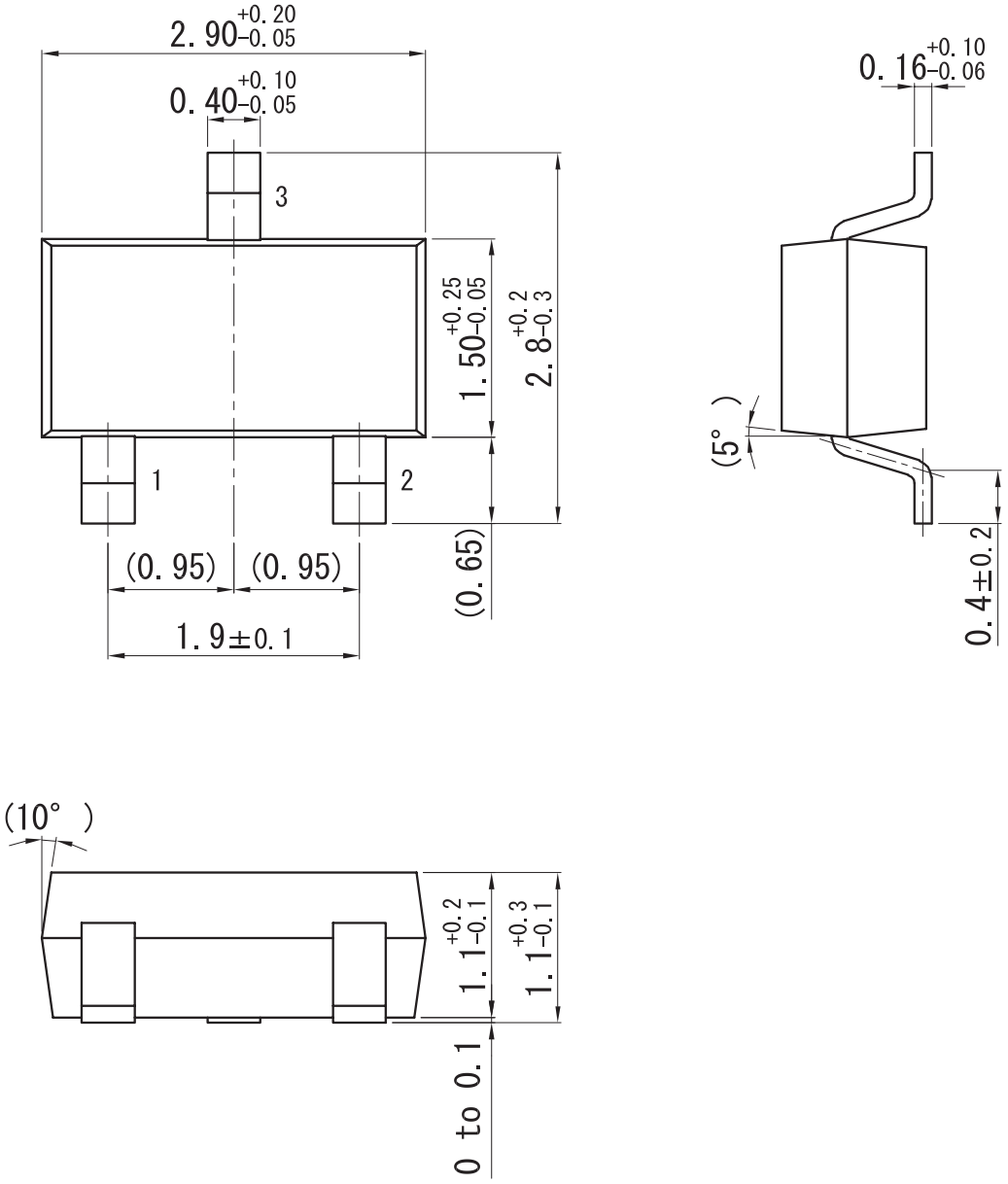


$P_{F(AV)}$ — $I_{F(AV)}$

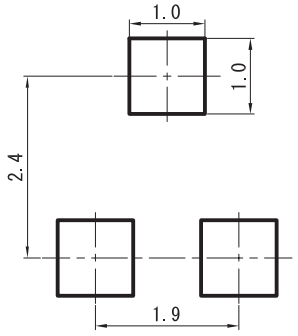


Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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