DB2X415

Silicon epitaxial planar type

For rectification

■ Features

- Low forward voltage V_F
- High forward current (Average) rating : $I_{F(AV)}$ = 3 A
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

■ Package

- Code
  Mini2-F4-B
- Pin Name
  1: Cathode
  2: Anode

■ Marking Symbol: AD

■ Packaging

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

■ Absolute Maximum Ratings T_a = 25°C

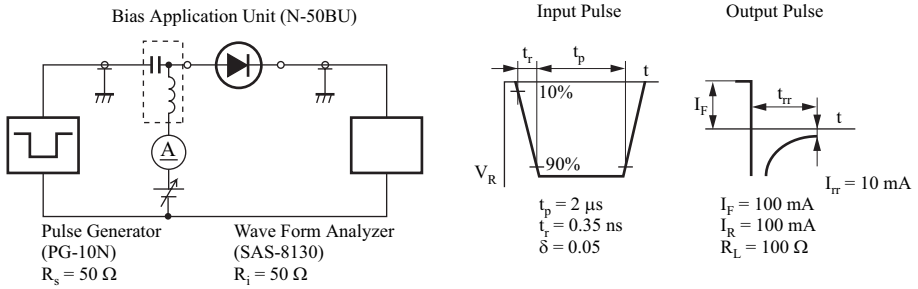
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	40	V
Forward current (Average) *1	$I_{F(AV)}$	3.0	A
Non-repetitive peak forward surge current	I_{FSM}	50 *2	A
		15 *3	
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	–55 to +125	°C

Note) ∗1: Mounted on an alumina PC board
∗2: Rectangle wave 1 cycle (Pulse width = 50 ms, non-repetitive peak current))
∗3: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

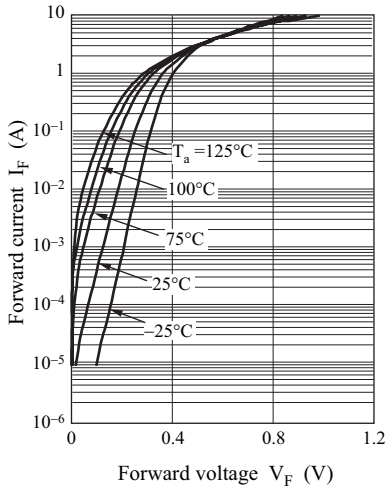
■ Electrical Characteristics T_a = 25°C±3°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	I_F = 1.0 A		0.35	0.44	V
	V_{F2}	I_F = 3.0 A		0.47	0.55	
Reverse current	I_R	V_R = 40 V		40	200	μA
Terminal capacitance	C_t	V_R = 10 V, f = 1 MHz		70		pF
Reverse recovery time *	t_{rr}	I_F = I_R = 100 mA, I_{rr} = 10 mA, R_L = 100 Ω		25		ns

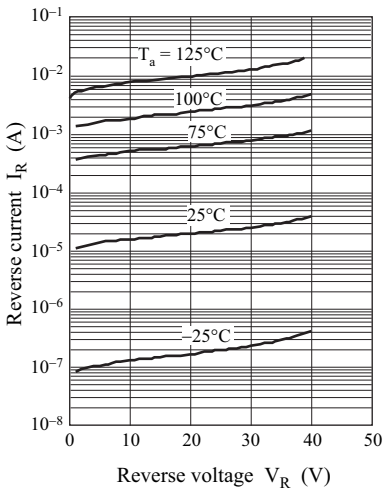
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3.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



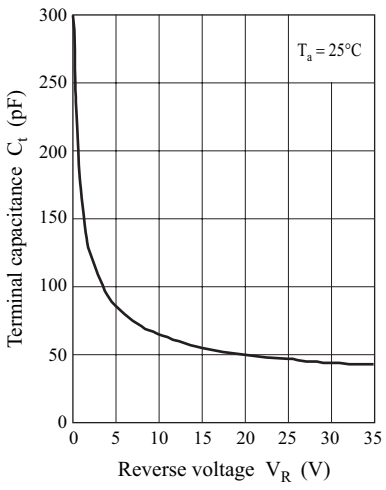
I_F — V_F



I_R — V_R

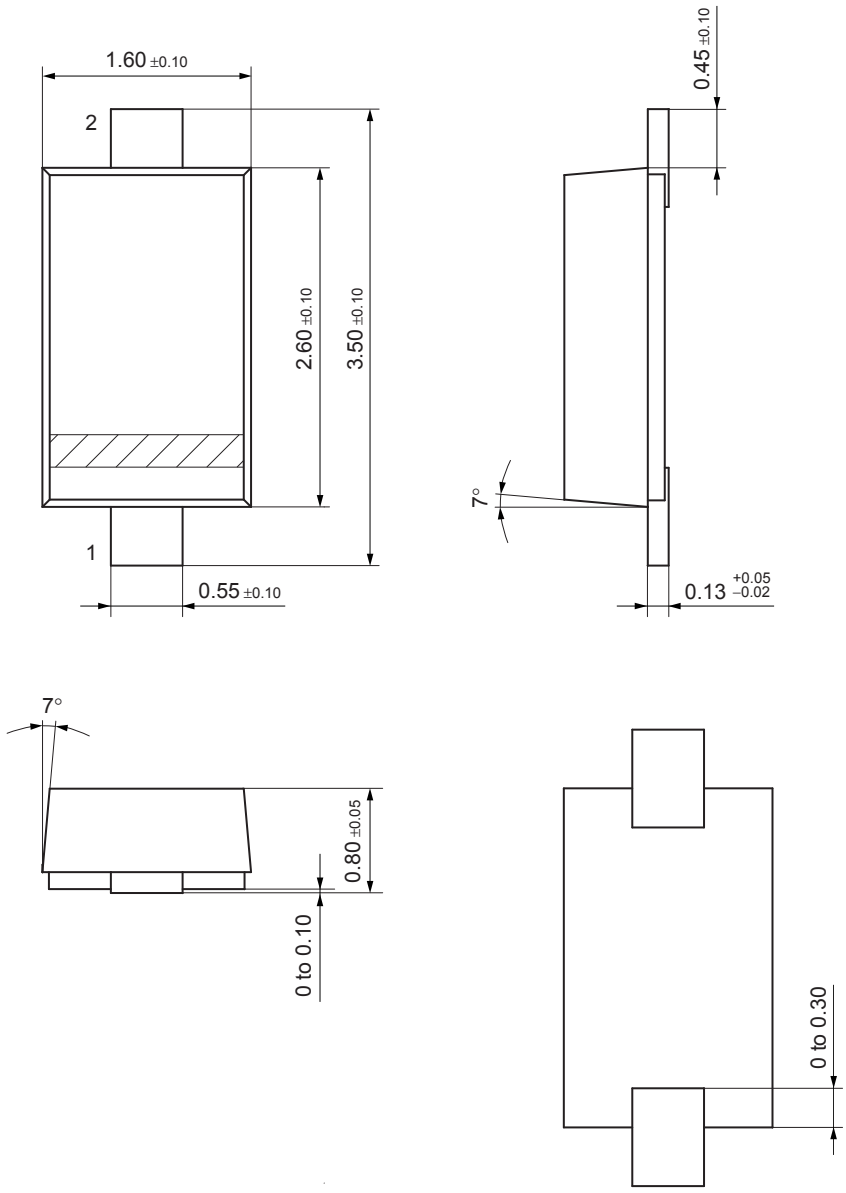


C_t — V_R



Mini2-F4-B

Unit: mm



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