MA2YJ50

Silicon epitaxial planar type

For rectification

■ Features

- Forward current (Average) $I_{F(AV)}$ = 3.0 A rectification is possible.
- Low forward voltage V_F : 0.55 V (max.)

■ Package

- Code
  Mini2-F1
- Pin Name
  1: Anode
  2: Cathode

■ Marking Symbol: 3D

■ Absolute Maximum Ratings T_a = 25°C

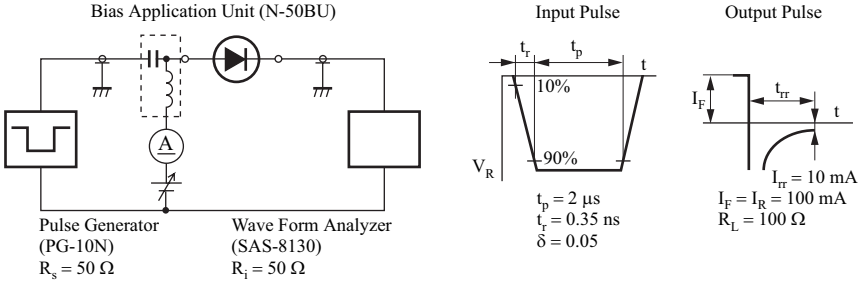
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	40	V
Forward current (Average) *1	$I_{F(AV)}$	3.0	A
Non-repetitive peak forward surge current	I_{FSM}	50 *2	A
		15 *3	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–55 to +150	°C

Note) ∗1: Lead temperature: Tl = 60°C, DC wave on
∗2: Rectangle wave 1 cycle (Pulse width = 50 µs, non-repetitive peak current)
∗3: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

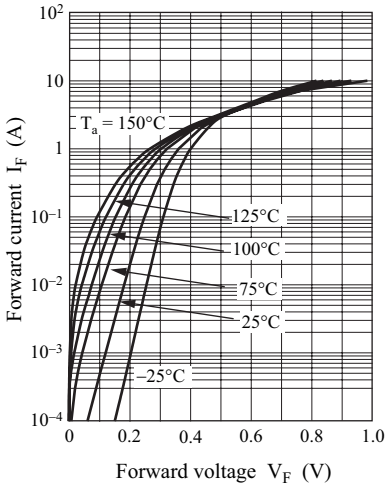
■ Electrical Characteristics T_a = 25°C±3°C

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
Thermal resistance (j-a)	$R_{th(j-a)}$	Mounted on an alumina PC board		110		°C/W
		Mounted on a glass epoxy PC board		160		
Thermal resistance (j-l)	$R_{th(j-l)}$			60		°C/W

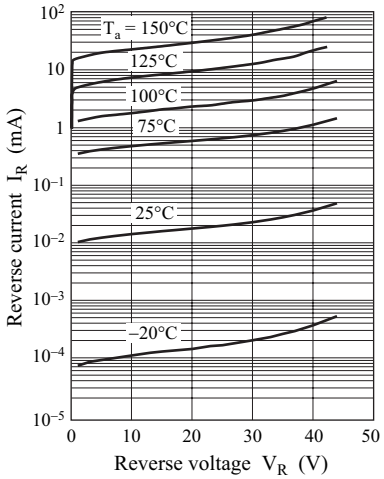
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3.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



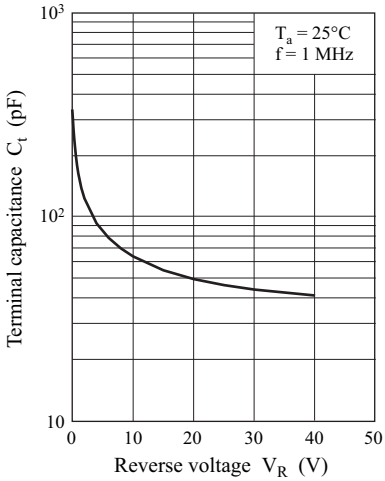
I_F — V_F



I_R — V_R

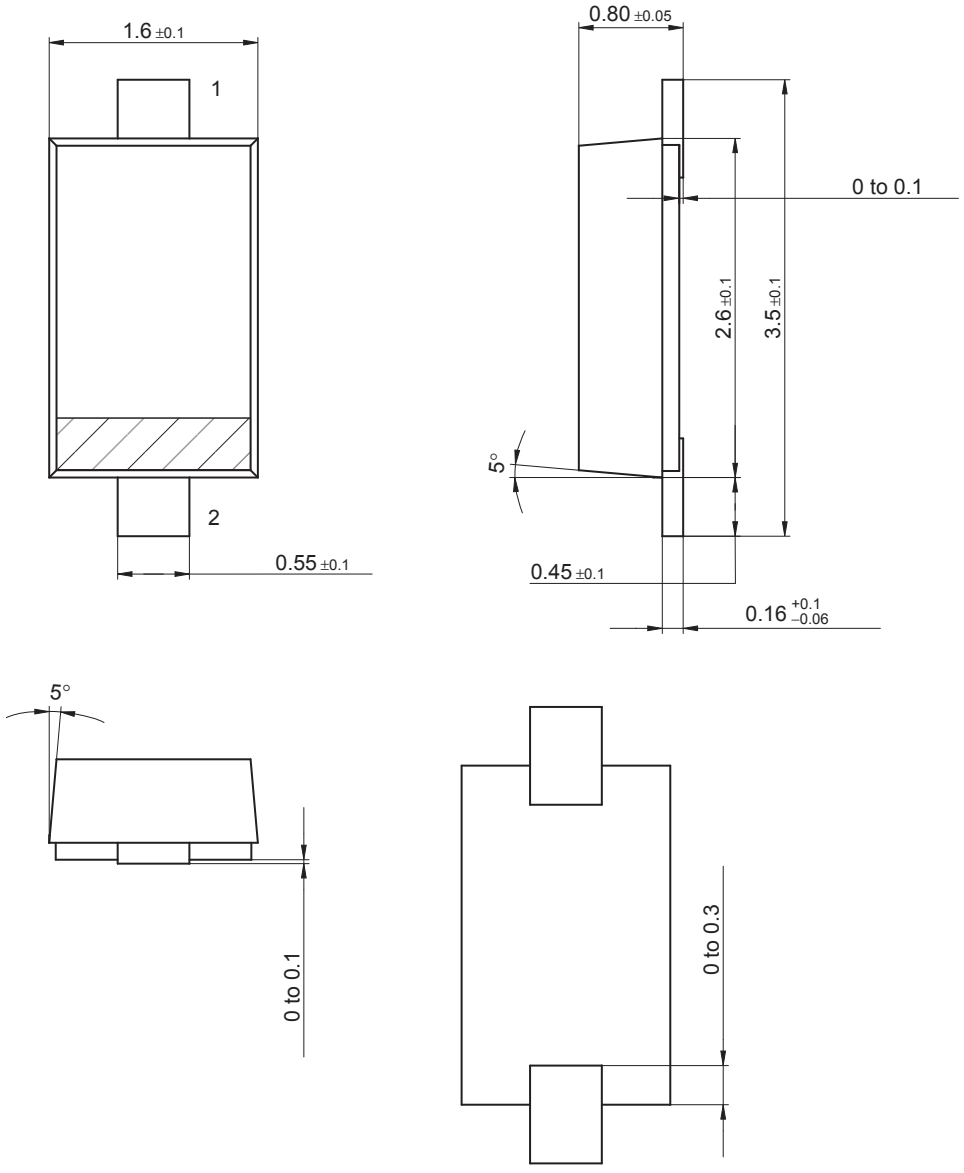


C_t — V_R



Mini2-F1

Unit: mm



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