DB2J317

Silicon epitaxial planar type

For rectification

■ Features

- Low forward voltage V_F
- Small reverse current I_R
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

■ Package

- Code
  SMini2-F5-B
- Pin Name
  1: Cathode
  2: Anode

■ Marking Symbol: 3S

■ Packaging

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

■ Absolute Maximum Ratings $T_a = 25°C$

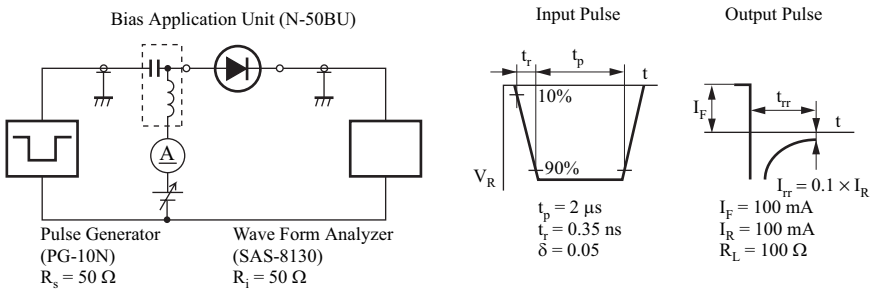
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Forward current (Average) *1	$I_{F(AV)}$	1	A
Non-repetitive peak forward surge current *2	I_{FSM}	3	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	–55 to +125	°C

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

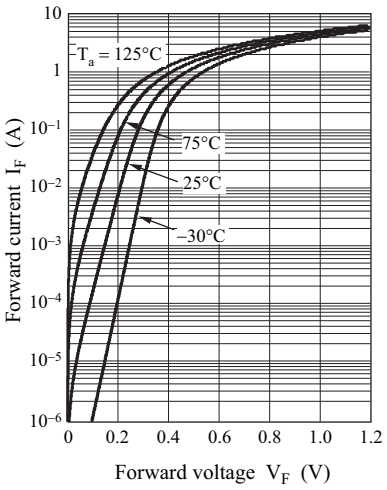
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F = 700$ mA		0.41	0.48	V
	V_{F2}	$I_F = 1$ A		0.46	0.52	
Reverse current	I_R	$V_R = 30$ V		10	100	μA
Terminal capacitance	C_t	$V_R = 10$ V, f = 1 MHz		22		pF
Reverse recovery time *	t_{rr}	$I_F = 100$ mA, $I_{rr} = 0.1 \times I_R$, $R_L = 100\ \Omega$		7.8		ns

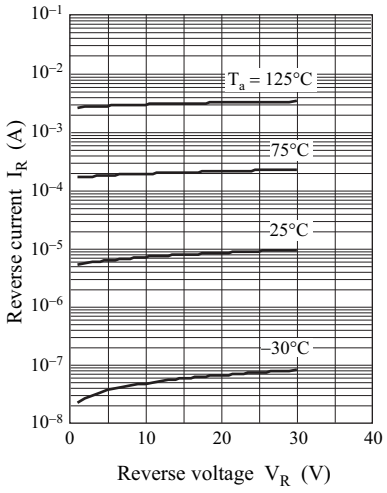
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3.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



I_F — V_F

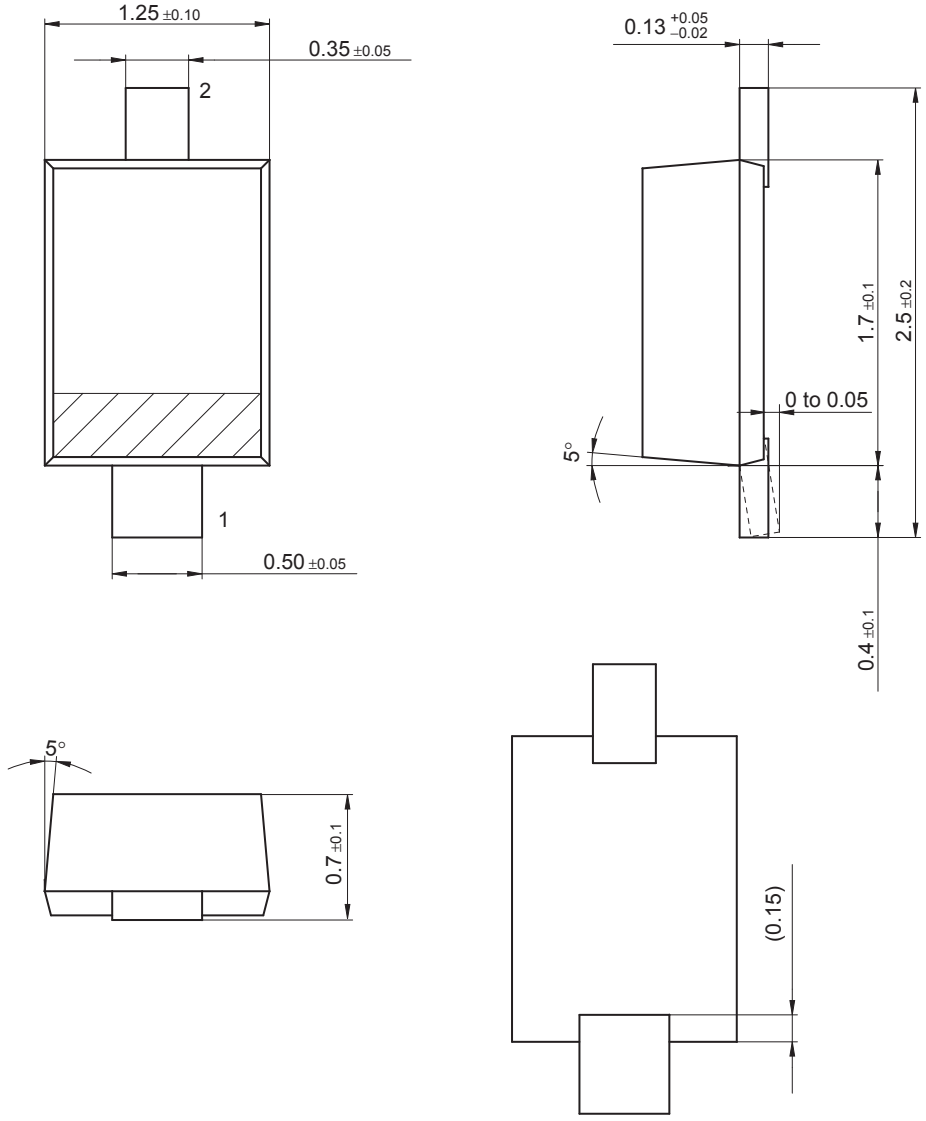

10
1
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
Forward current I_F (A)
T_a = 125°C
75°C
25°C
−30°C
0
0.2
0.4
0.6
0.8
1.0
1.2
Forward voltage V_F (V)

I_R — V_R


10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
10^{-7}
10^{-8}
Reverse current I_R (A)
T_a = 125°C
75°C
25°C
−30°C
0
10
20
30
40
Reverse voltage V_R (V)

SMini2-F5-B

Unit: mm



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