MA22D39

Silicon epitaxial planar type

For high speed switching circuits

■ Features

- Optimum for forward current (Effective value) $I_{F(RMS)}$ = 1.57 A rectification
- Reverse voltage V_R = 40 V is guaranteed

■ Package

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

■ Marking Symbol: 3N

■ Absolute Maximum Ratings T_a = 25°C

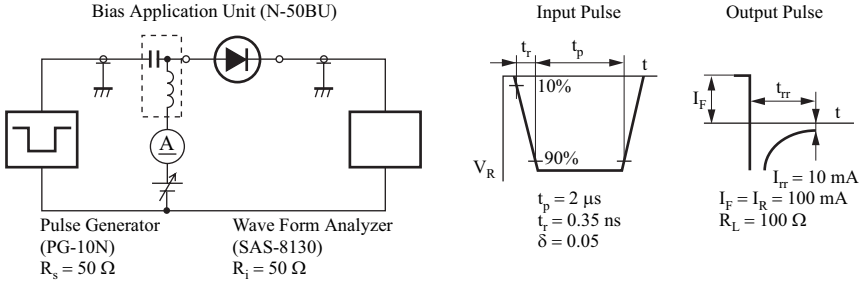
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	40	V
Maximum peak reverse voltage	V_{RM}	40	V
Forward current (Effective value) *1	$I_{F(RMS)}$	1.57	A
Non-repetitive peak forward surge current *2	I_{FSM}	30	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–55 to +150	°C

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

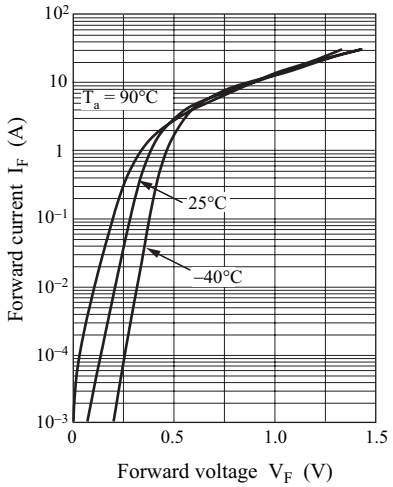
■ Electrical Characteristics T_a = 25°C±3°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	I_F = 0.5 A			0.48	V
	V_{F2}	I_F = 1.1 A			0.54	
	V_{F3}	I_F = 1.5 A			0.57	
Reverse current	I_R	V_R = 40 V			100	µA
Terminal capacitance	C_t	V_R = 10 V, f = 1 MHz		50		pF
Reverse recovery time *	t_{rr}	$I_F = I_R$ = 100 mA, I_{rr} = 10 mA, R_L = 100 Ω		30		ns

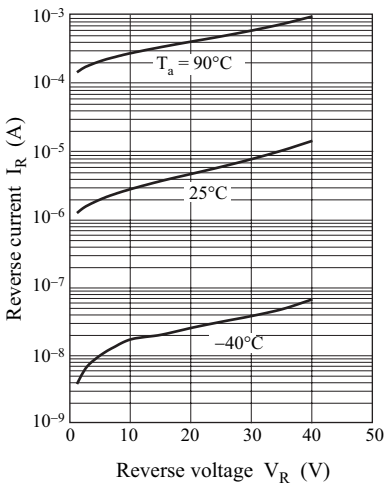
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3.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



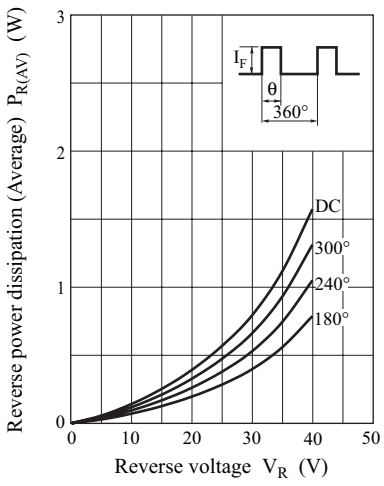
I_F — V_F



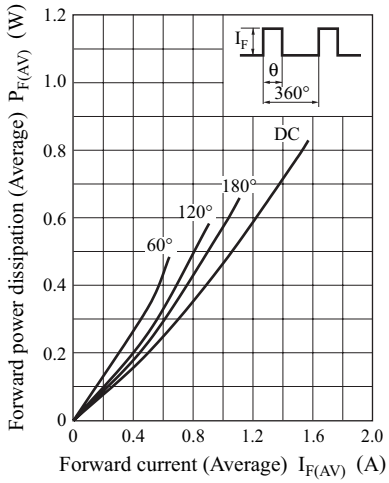
I_R — V_R



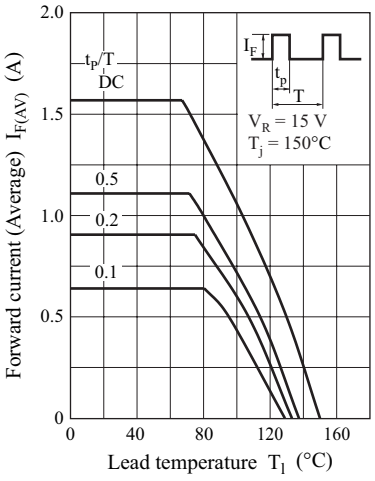
$P_{R(AV)}$ — V_R



$P_{F(AV)}$ — $I_{F(AV)}$

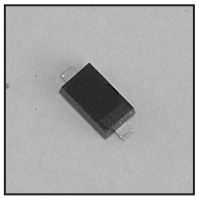


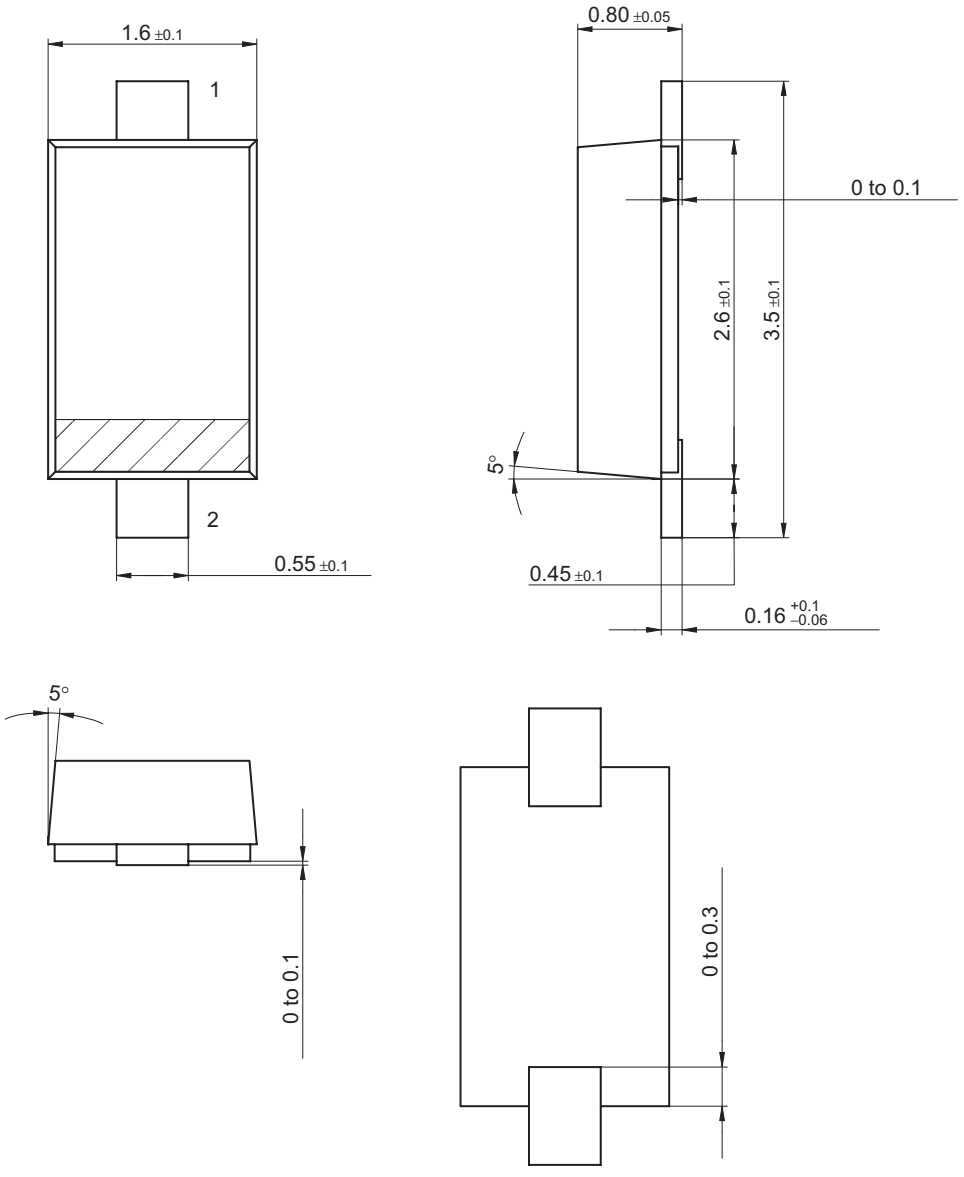
$I_{F(AV)}$ — T_l



Mini2-F1

Unit: mm





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