

MA22D41

Silicon epitaxial planar type

For rectification

■ Overview

MA22D41 is optimal for general circuit supplies.

■ Features

- Forward current (Average) $I_{F(AV)} = 2.0$ A rectification is possible
- Low forward voltage V_F

■ Package

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

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Maximum peak reverse voltage	V_{RM}	30	V
Forward current (Average) *1	$I_{F(AV)}$	2.0	A
Non-repetitive peak forward surge current *2	I_{FSM}	30	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

■ Marking Symbol: 3V

Note) *1: Lead temperature: $T_l = 80^\circ\text{C}$, DC wave on

*2: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

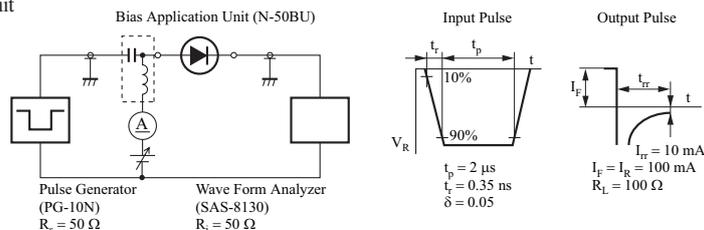
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F = 1.0$ A			0.40	V
	V_{F2}	$I_F = 2.0$ A			0.45	
Reverse current	I_R	$V_R = 30$ V			500	μA
Terminal capacitance	C_t	$V_R = 10$ V, $f = 1$ MHz		60		pF
Reverse recovery time *1	t_{rr}	$I_F = I_R = 100$ mA, $I_{rr} = 10$ mA, $R_L = 100 \Omega$		19		ns
Thermal resistance (j-a) *2	$R_{th(j-a)}$	Mounted on an alumina PC board		160		$^\circ\text{C}/\text{W}$
Thermal resistance (j-l)	$R_{th(j-l)}$			50		$^\circ\text{C}/\text{W}$

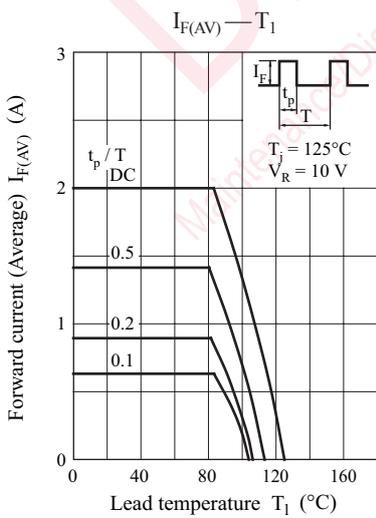
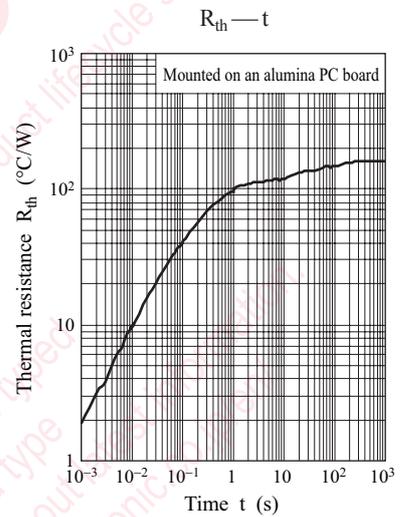
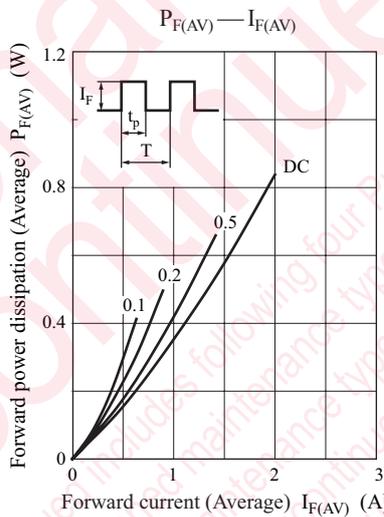
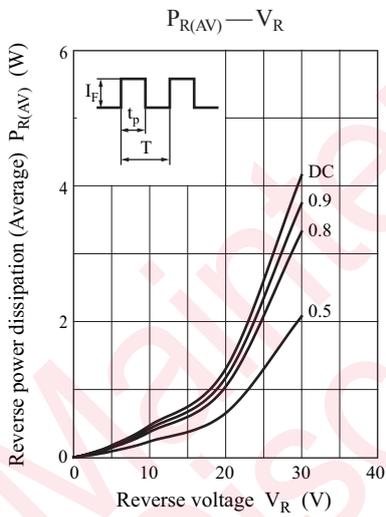
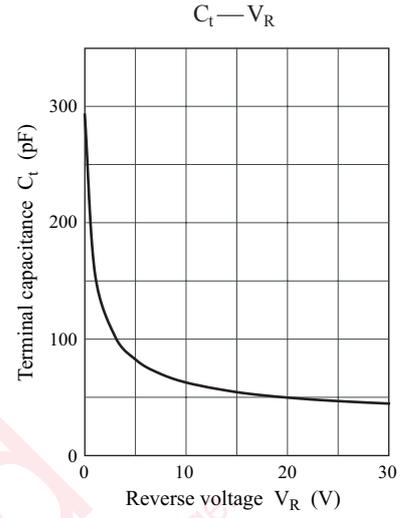
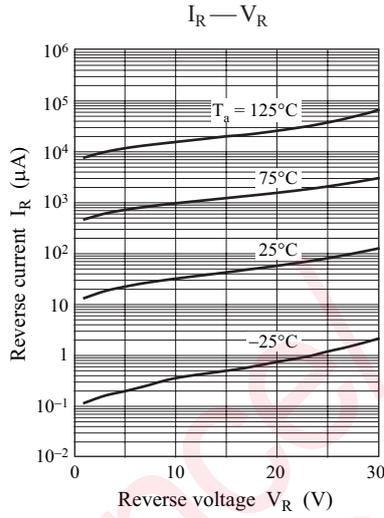
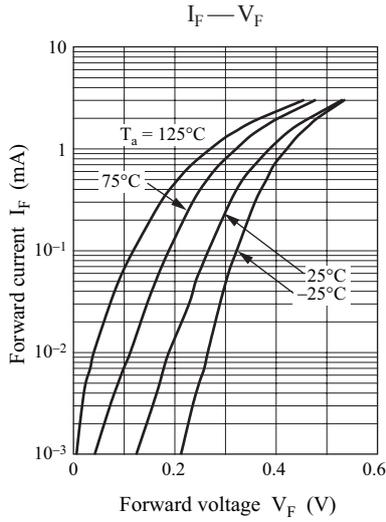
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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. *1: t_{rr} measurement circuit

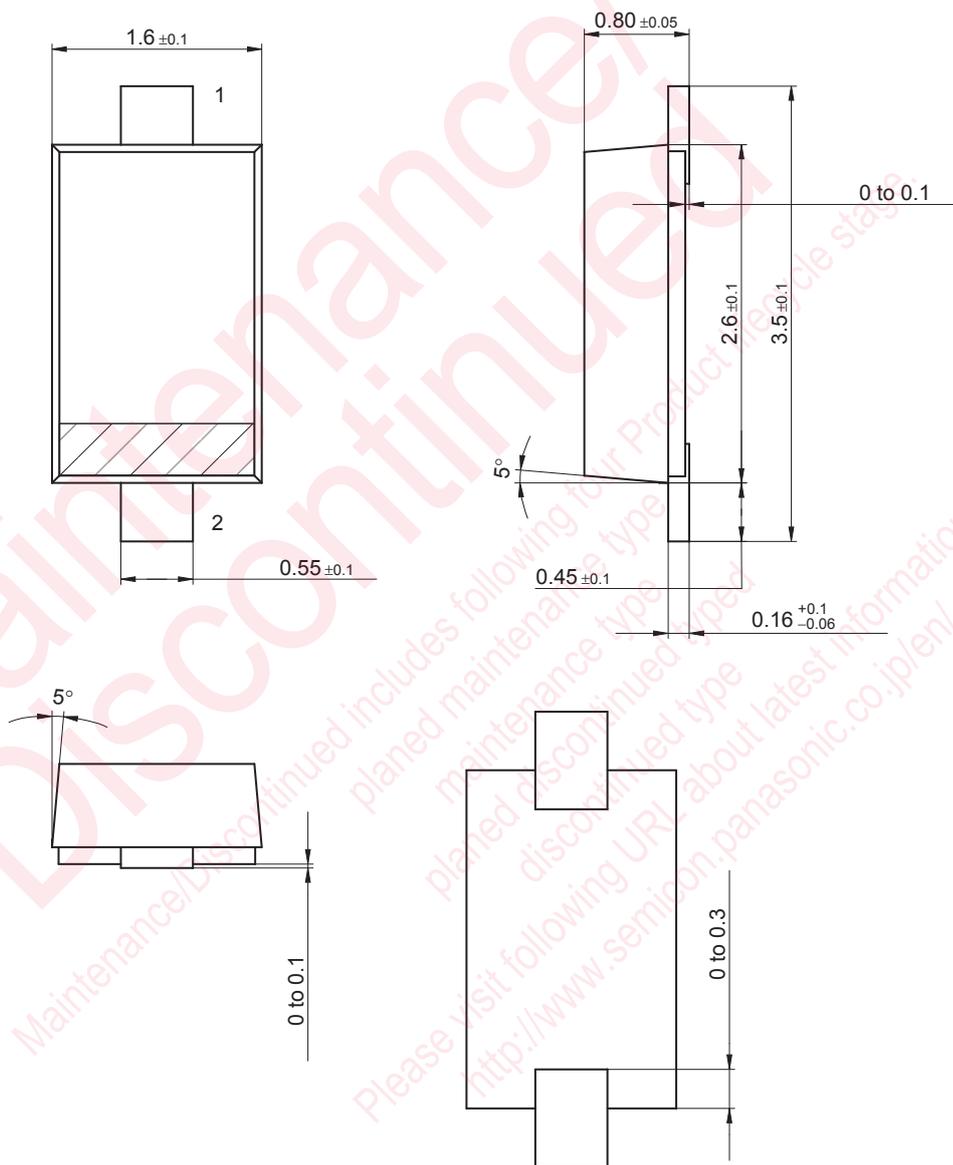


*2: Mounted on an alumina PC board (Board: 20 mm × 50 mm, Soldering land: 2.0 mm × 2.0 mm + 0.8 mm × 2.0 mm)



Mini2-F1

Unit: mm



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