MA24D52

Silicon epitaxial planar type

For rectification

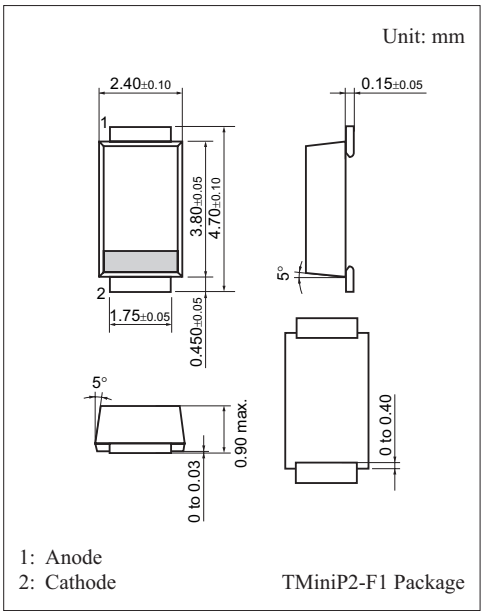
■ Features

- Forward current (Average) $I_{F(AV)}$ = 3.0 A rectification is possible
- Extremely small reverse current I_R

■ 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 (Average) *	$I_{F(AV)}$	3.0	A
Non-repetitive peak forward surge current	I_{FSM}	60	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-40 to +150	°C

Note) ∗: 50 Hz sine wave 1 cycle (Non-repetitive peak current)



Marking Symbol: 5T

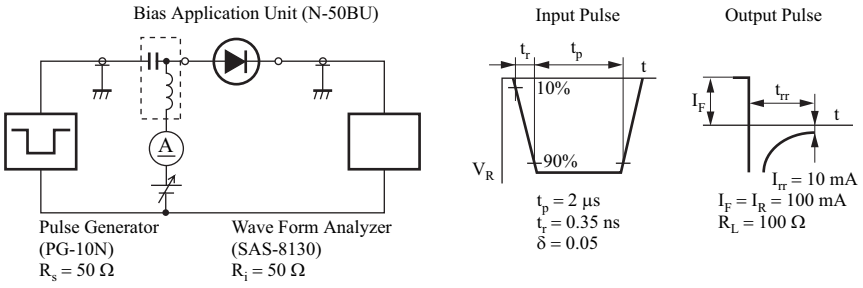
■ Electrical Characteristics T_a = 25°C±3°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward current	V_F	I_F = 3.0 A		0.48	0.53	V
Reverse current	I_R	V_R = 40 V			50	μA
Terminal capacitance	C_t	V_R = 10 V, f = 1 MHz		75		pF
Reverse recovery time *1	t_{rr}	$I_F = I_R$ = 100 mA, I_{rr} = 10 mA R_L = 100 Ω		25		ns
Thermal resistance	$R_{th(j-a)}$ *2			55		°C/W
	$R_{th(j-a)}$ *3			210		
	$R_{th(j-l)}$			10		

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} test Circuit



∗2: Mounted on an alumina PC board (board: 50 mm × 50 mm × 0.8 t, soldering land: 1.4 mm × 2.1 mm)

∗3: With a glass epoxy PC board (board: 50 mm × 20 mm × 1.0 t, soldering land: 2.0 mm × 2.0 mm + 20 mm × 0.8 mm)

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