MA2YD33

Silicon epitaxial planar type

For high frequency rectification

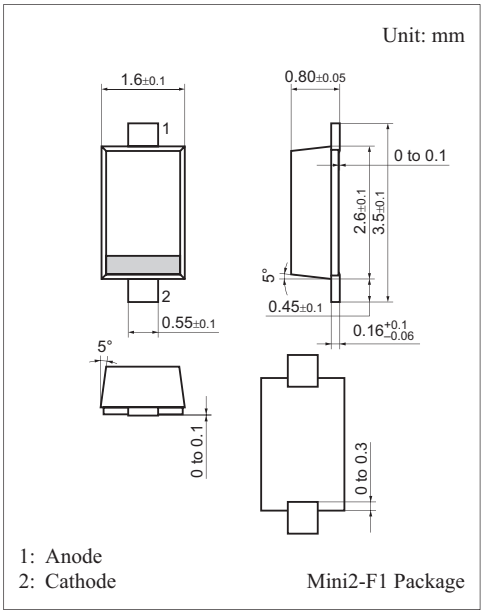
■ Features

- Forward current (Average) $I_{F(AV)}$ = 500 mA rectification is possible
- Small reverse current I_R

■ Absolute Maximum Ratings T_a = 25°C

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Repetitive peak reverse voltage	V_{RRM}	30	V
Forward current (Average)	$I_{F(AV)}$	500	mA
Non-repetitive peak forward surge current *	I_{FSM}	3	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	–55 to +125	°C

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



Marking Symbol: 2V

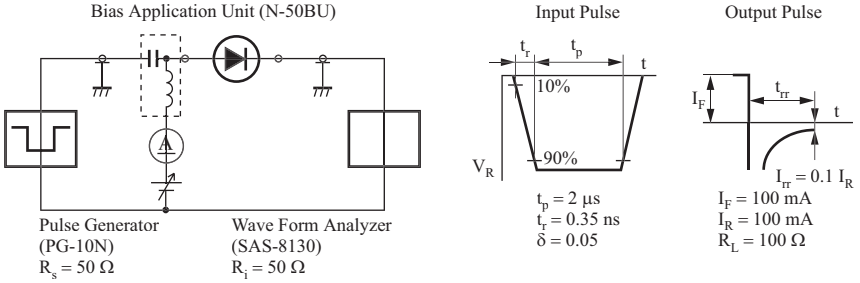
■ Electrical Characteristics T_a = 25°C±3°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	I_F = 10 mA		0.3	0.4	V
	V_{F2}	I_F = 500 mA		0.5	0.55	
Reverse current	I_R	V_R = 30 V			50	μA
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		60		pF
Reverse recovery time *	t_{rr}	$I_F = I_R$ = 100 mA, I_{rr} = 0.1 I_R R_L = 100 Ω		5		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



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Even when the products are used within the guaranteed values, take into the consideration of incidence of break down and failure mode, possible to occur to semiconductor products. Measures on the systems such as redundant design, arresting the spread of fire or preventing glitch are recommended in order to prevent physical injury, fire, social damages, for example, by using the products.

(6) Comply with the instructions for use in order to prevent breakdown and characteristics change due to external factors (ESD, EOS, thermal stress and mechanical stress) at the time of handling, mounting or at customer's process. When using products for which damp-proof packing is required, satisfy the conditions, such as shelf life and the elapsed time since first opening the packages.