# MA3J700 (MA10700)

## Silicon epitaxial planar type

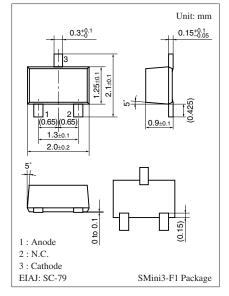
For high frequency rectification

#### Features

- Forward current (Average)  $I_{F(AV)} = 500 \text{ mA}$  rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time t<sub>rr</sub>

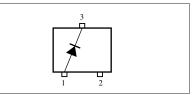
Absolute Maximum Ratings $T_a = 25^{\circ}C$						
Parameter	Symbol	Rating	Unit			
Reverse voltage	V <sub>R</sub>	40	V			
Repetitive peak reverse voltage	V <sub>RRM</sub>	40	V			
Forward current (Average)	I <sub>F(AV)</sub>	500	mA			
Non-repetitive peak forward surge current *	I <sub>FSM</sub>	2	А			
Junction temperature	Tj	125	°C			
Storage temperature	T <sub>stg</sub>	-55 to +150	°C			

Note) \*: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)



#### Marking Symbol: M2W

#### Internal Connection



Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F</sub>	$I_F = 500 \text{ mA}$			0.55	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 35 V			100	μΑ
Terminal capacitance	Ct	$V_R = 0 V, f = 1 MHz$		60		pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}$		5		ns
		$I_{rr} = 0.1 I_R, R_L = 100 \Omega$				

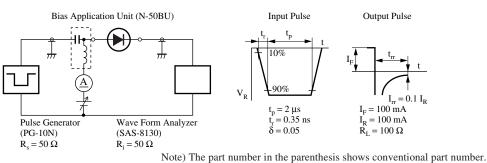
### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

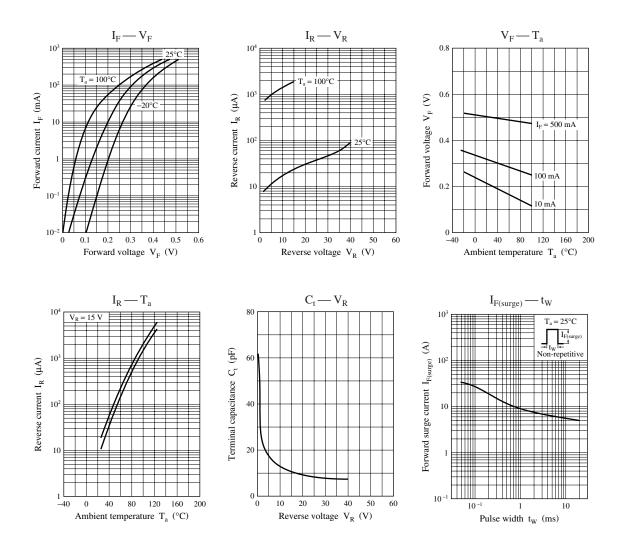
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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.

4.\*: trr measurement circuit

3. Absolute frequency of input and output is 400 MHz.





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