MA3J700 (MA10700)

Silicon epitaxial planar type

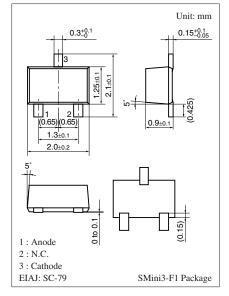
For high frequency rectification

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_{rr}

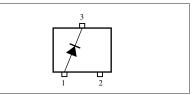
Absolute Maximum Ratings $T_a = 25^{\circ}C$						
Parameter	Symbol	Rating	Unit			
Reverse voltage	V _R	40	V			
Repetitive peak reverse voltage	V _{RRM}	40	V			
Forward current (Average)	I _{F(AV)}	500	mA			
Non-repetitive peak forward surge current *	I _{FSM}	2	А			
Junction temperature	Tj	125	°C			
Storage temperature	T _{stg}	-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 _F	$I_F = 500 \text{ mA}$			0.55	V
Reverse current	I _R	V _R = 35 V			100	μΑ
Terminal capacitance	Ct	$V_R = 0 V, f = 1 MHz$		60		pF
Reverse recovery time *	t _{rr}	$I_F = I_R = 100 \text{ mA}$		5		ns
		$I_{rr} = 0.1 I_R, R_L = 100 \Omega$				

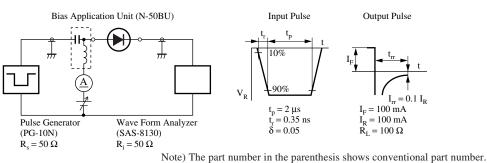
Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

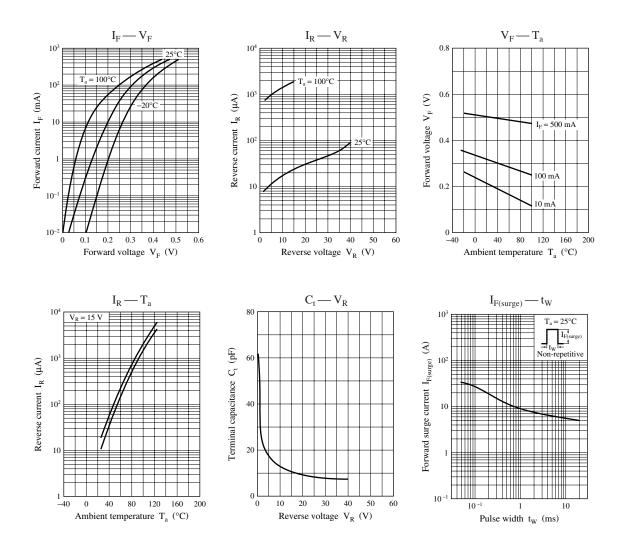
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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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