

MA2C700 (MA700), MA2C700A (MA700A)

Silicon epitaxial planar type

For wave detection

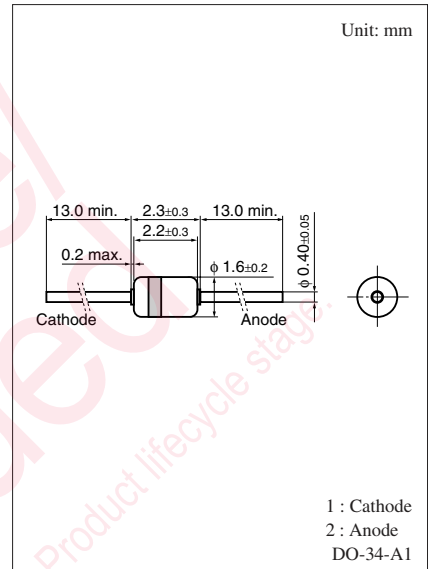
For super high speed switching

■ Features

- Low forward voltage V_F and good wave detection efficiency η
- Small temperature coefficient of forward characteristic
- Small reverse current I_R
- High-density mounting (5 mm pitch insertion) is possible

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

Parameter	Symbol	Rating	Unit
Reverse voltage	MA2C700	$V_R = 15$	V
	MA2C700A	30	
Maximum peak reverse voltage	MA2C700	$V_{RM} = 15$	V
	MA2C700A	30	
Forward current	I_F	30	mA
Peak forward current	I_{FM}	150	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$



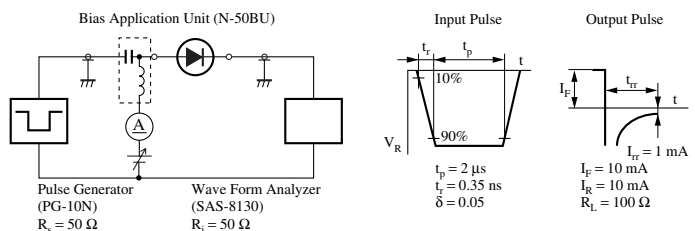
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F = 1 \text{ mA}$			0.4	V
	V_{F2}	$I_F = 30 \text{ mA}$			1.0	
Reverse current	I_R	MA2C700	$V_R = 15 \text{ V}$		100	nA
		MA2C700A	$V_R = 30 \text{ V}$		150	
Terminal capacitance	C_t	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$		1.3		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 10 \text{ mA}$ $I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$		1.0		ns
Detection efficiency	MA2C700	$V_{IN} = 3 \text{ V}_{(peak)}, f = 30 \text{ MHz}$ $R_L = 3.9 \text{ k}\Omega, C_L = 10 \text{ pF}$		65		%
	MA2C700A			60		

- 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. Absolute frequency of input and output is 2 GHz. 4.*: t_{rr} measurement circuit

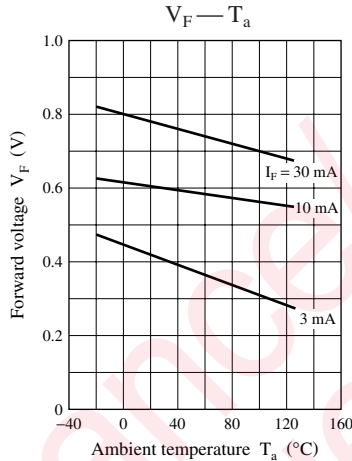
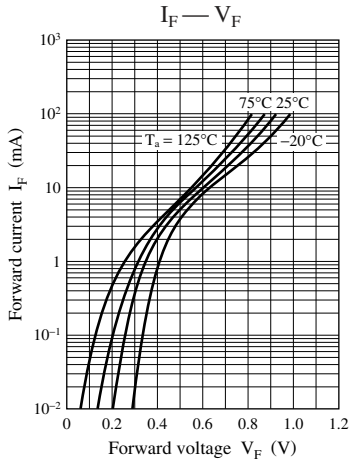
■ Cathode Mark

Type No.	MA2C700	MA2C700A
Color	1st Band: Silver	Silver
	2nd Band: —	Green

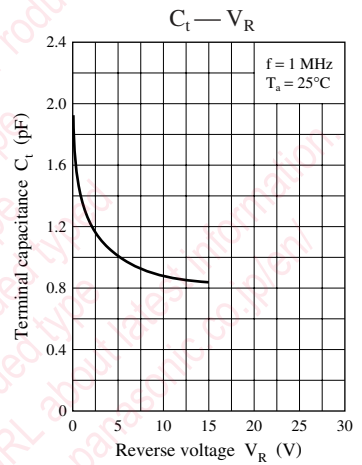
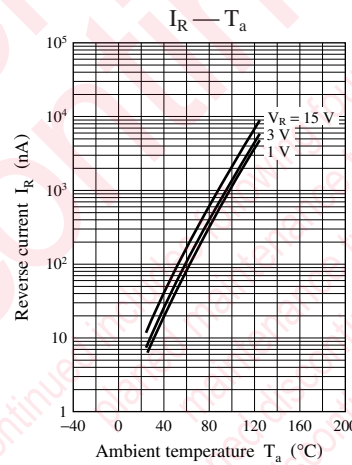
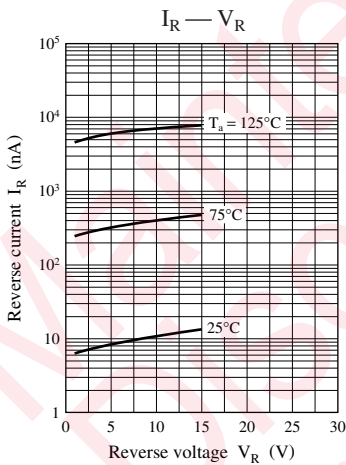


Note) The part number in the parenthesis shows conventional part number.

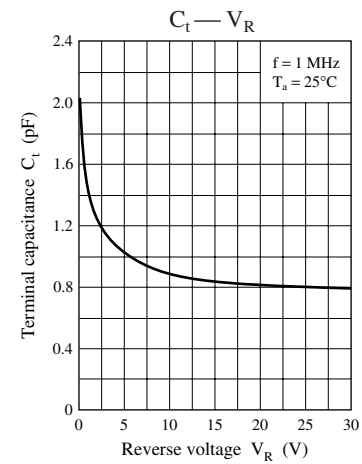
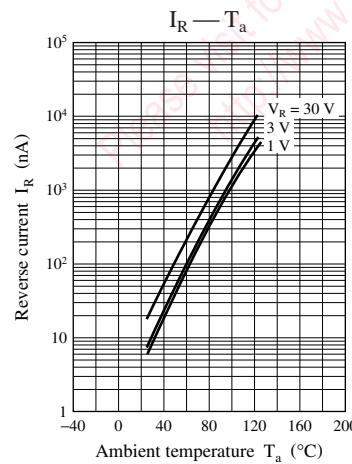
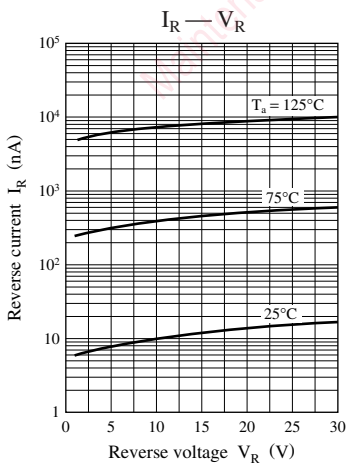
Common characteristics charts



Characteristics charts of MA2C700



Characteristics charts of MA2C700A



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