

# MA2C700, MA2C700A (MA700, MA700A)

Silicon epitaxial planar type

For wave detection

For super high speed switching

## ■ Features

- Low forward voltage  $V_F$  and good wave detection efficiency  $\eta$
- Small temperature coefficient of forward characteristic
- Small reverse current  $I_R$
- High-density mounting (5 mm pitch insertion) is possible
- DO-34-A1(DHD) package

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

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)	MA2C700	$V_R$	15	V
	MA2C700A		30	
Peak reverse voltage	MA2C700	$V_{RM}$	15	V
	MA2C700A		30	
Peak forward current		$I_{FM}$	150	mA
Forward current (DC)		$I_F$	30	mA
Junction temperature		$T_j$	125	°C
Storage temperature		$T_{sto}$	-55 to +125	°C

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

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

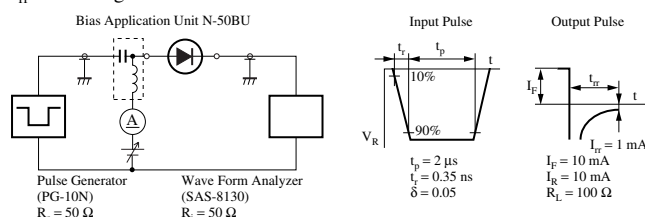
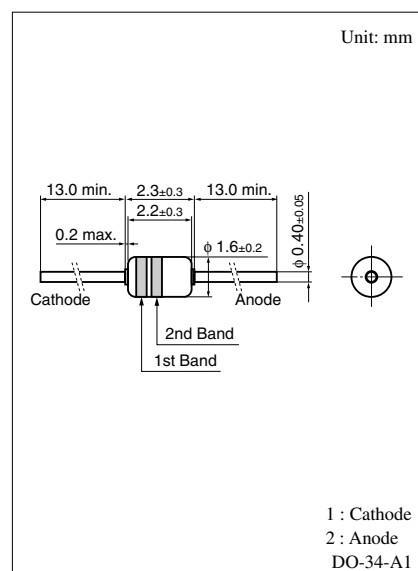
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 2 GHz

3. \*:  $t_{rr}$  measuring instrument

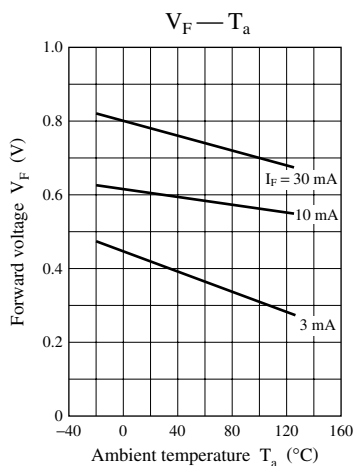
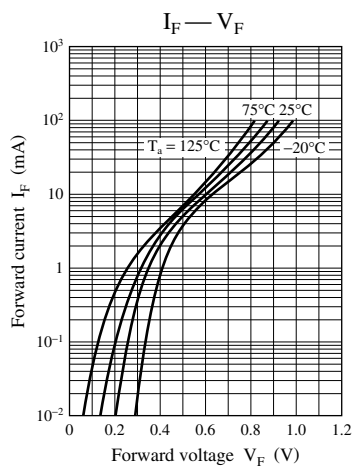
## ■ Cathode Mark

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

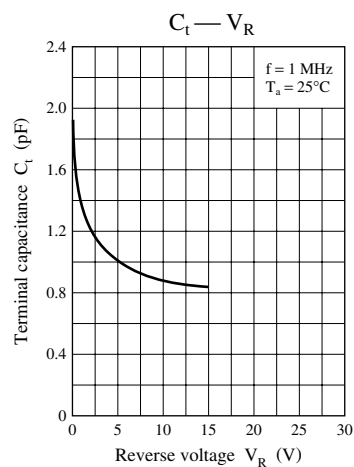
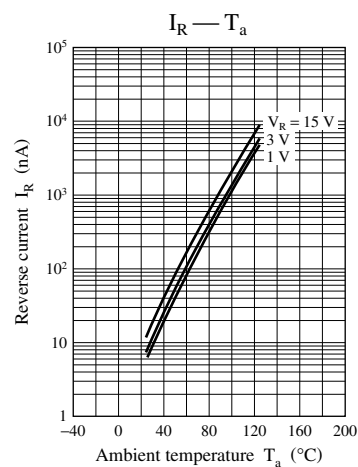
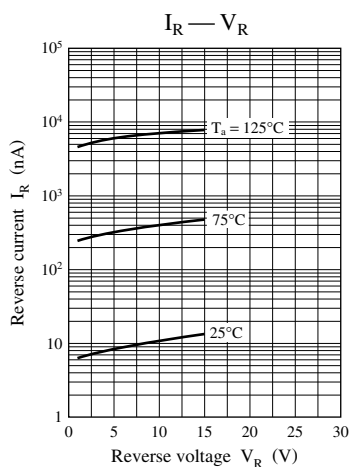


Note) The part number in the parenthesis shows conventional part number.

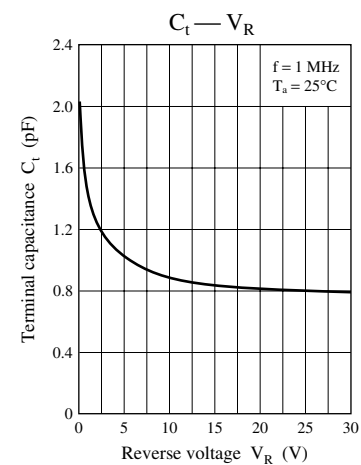
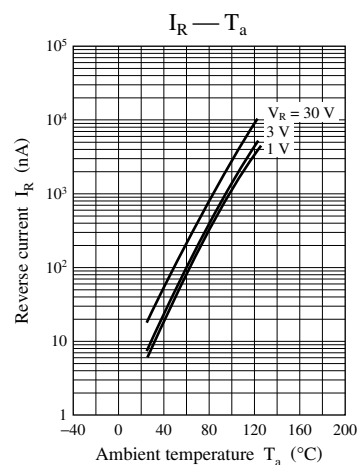
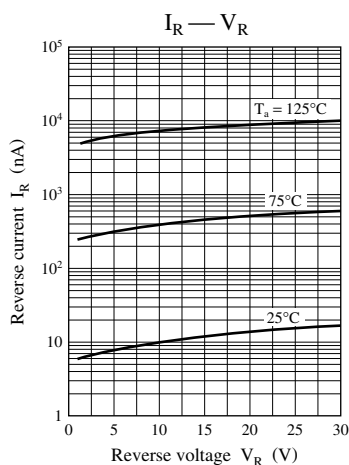
## Characteristics charts common to all



## Characteristics charts of MA2C700



## Characteristics charts of MA2C700A



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