

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 η
- 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_{sg}	−55 to +125	°C

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

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

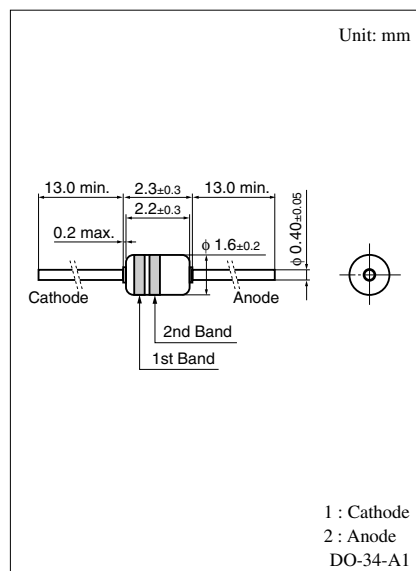
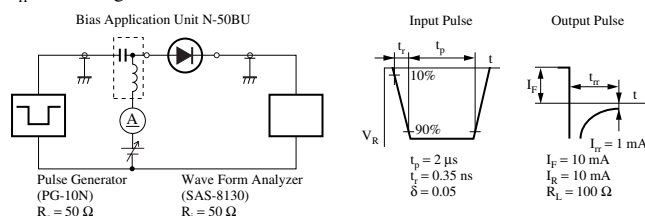
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 2 GHz

3. *: t_{rr} measuring instrument

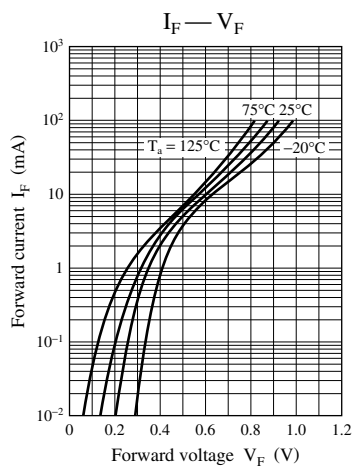
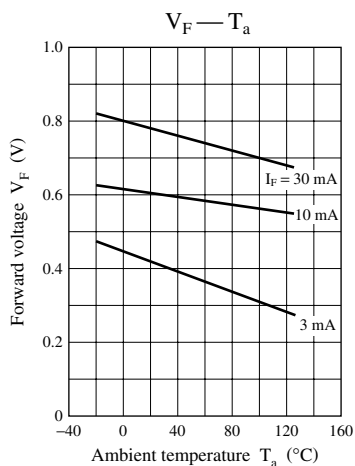
■ Cathode Mark

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

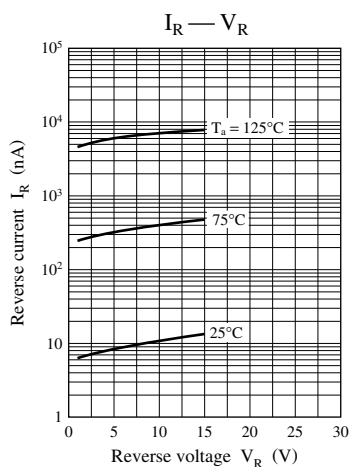
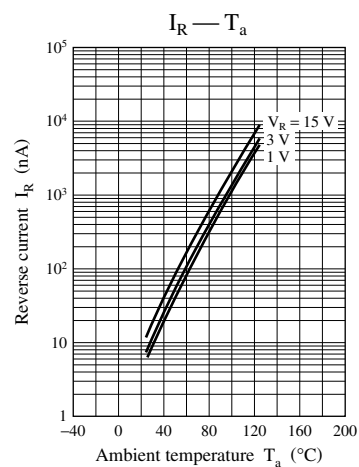
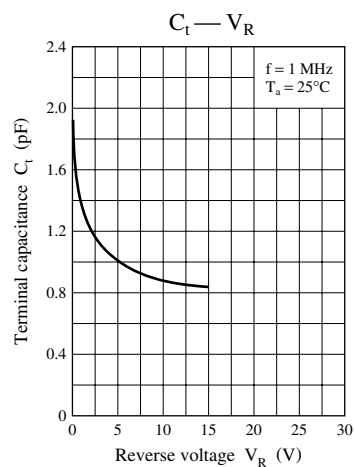


Note) The part number in the parenthesis shows conventional part number.

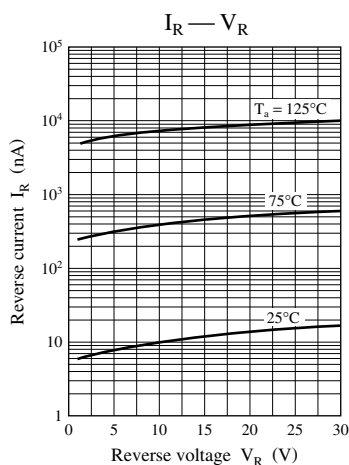
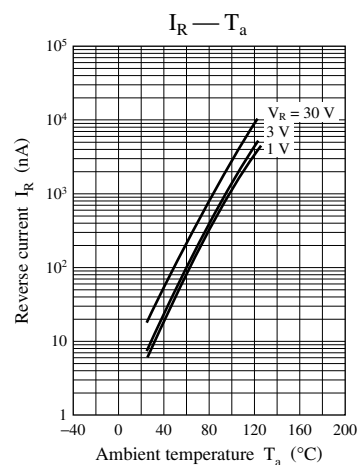
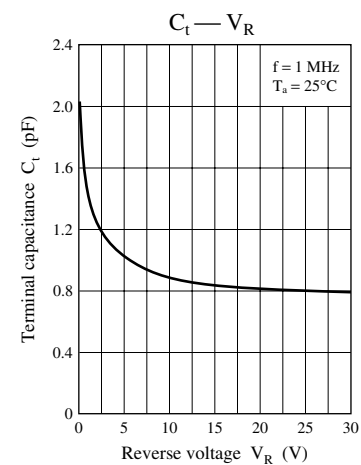
Characteristics charts common to all



Characteristics charts of MA2C700



Characteristics charts of MA2C700A



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