

MA2C700, MA2C700A(MA700,MA700A)

Silicon epitaxial planar type

For ordinary wave detection

For super high speed switching

■ Features

- Low forward rise voltage (V_F) and satisfactory wave detection efficiency (η)
- Small temperature coefficient of forward characteristic
- Extremely low reverse current I_R
- DO-34(DHD) envelope, allowing to insert to a 5 mm pitch hole

■ 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	$^\circ\text{C}$	
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$	

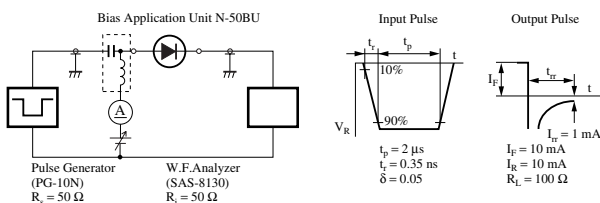
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

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		%

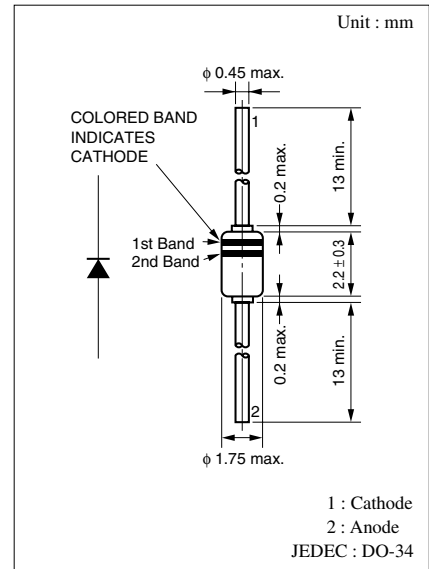
Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment

2. Rated input/output frequency: 2 000 MHz

3. *: t_{rr} measuring instrument



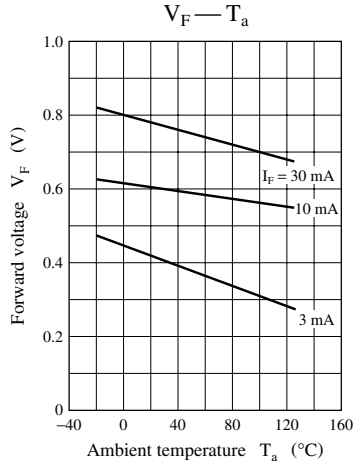
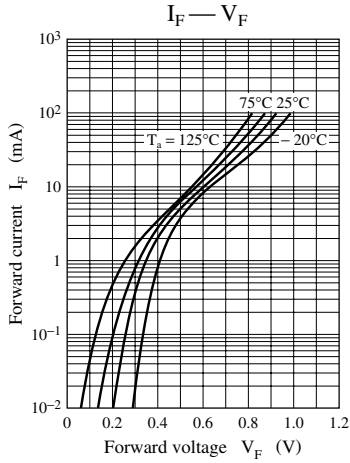
Note) The part number in the parenthesis shows conventional part number.



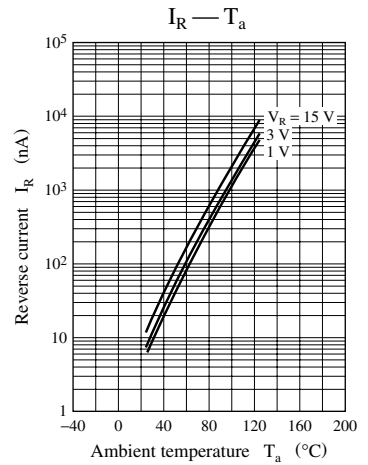
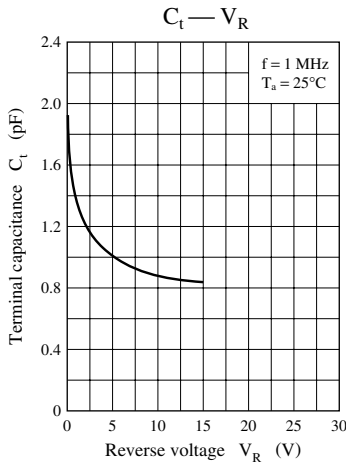
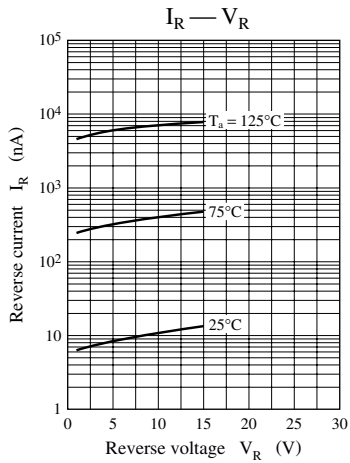
■ Cathode Indication

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

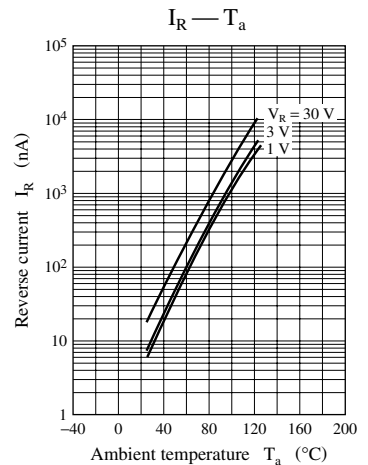
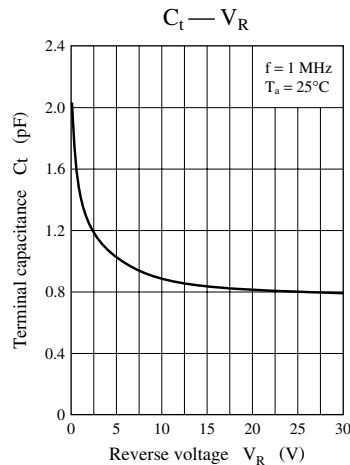
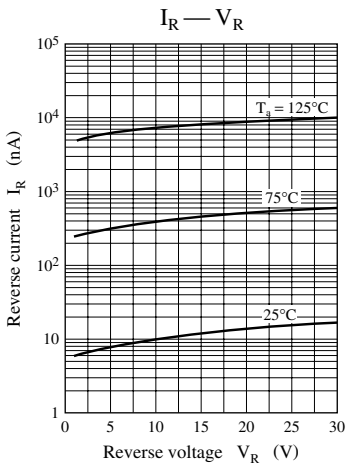
Common characteristics charts



Characteristics charts of MA2C700



Characteristics charts of MA2C700A



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