

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MA2C700 (MA700), MA2C700A (MA700A)

Silicon epitaxial planar type

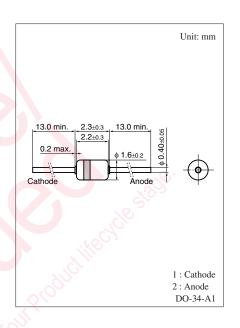
For wave detection
For super high speed switching

■ Features

- ullet 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 $T_a = 25$ °C

Paramet	ter	Symbol	Rating	Unit
Reverse voltage	MA2C700	V_R	15	V
	MA2C700A		30	
Maximum peak	MA2C700	V _{RM}	15	V
reverse voltage	MA2C700A		30	
Forward current		$I_{\rm F}$	30	mA
Peak forward current		I_{FM}	150	mA
Junction temperature		T _j	125	°C
Storage temperature		T_{stg}	-55 to +125	°C



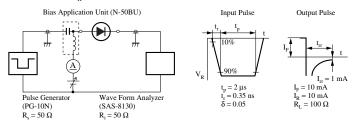
■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

Paramete	er	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage		V_{F1}	$I_F = 1 \text{ mA}$	~0 ₁₎ ,	U.	0.4	V
		V_{F2}	$I_F = 30 \text{ mA}$	30	55	1.0	
Reverse current	MA2C700	I_R	V _R = 15 V			100	nA
	MA2C700A		$V_R = 30 \text{ V}$	1.7		150	
Terminal capacitance		C _t	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$		1.3		pF
Reverse recovery time	e *	t _{rr}	$I_F = I_R = 10 \text{ mA}$		1.0		ns
			$I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$				
Detection efficiency	MA2C700	η	$V_{IN} = 3 V_{(peak)}$, $f = 30 MHz$		65		%
MA2C700A			$R_L = 3.9 \text{ k}\Omega, C_L = 10 \text{ pF}$		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

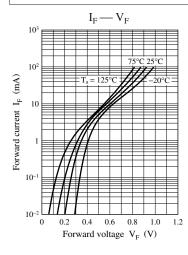
■ Cathode Mark

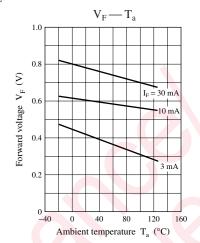
Type No.		MA2C700	MA2C700A		
Color	1st Band	Silver	Silver		
	2nd Band	_	Green		



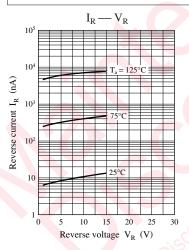
Note) The part number in the parenthesis shows conventional part number.

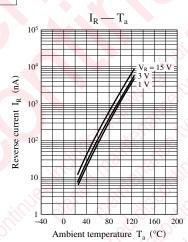
Common characteristics charts

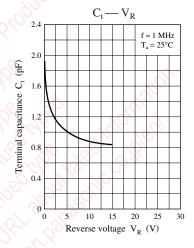




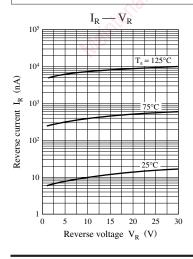
Characteristics charts of MA2C700

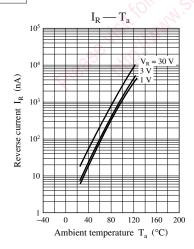


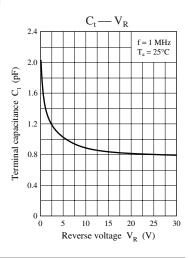




Characteristics charts of MA2C700A







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