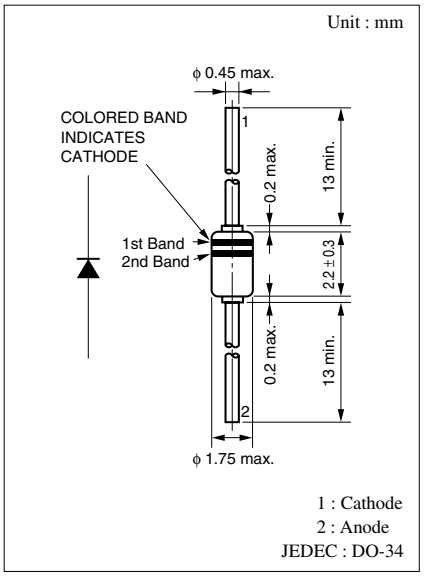
MA2C700, MA2C700A

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

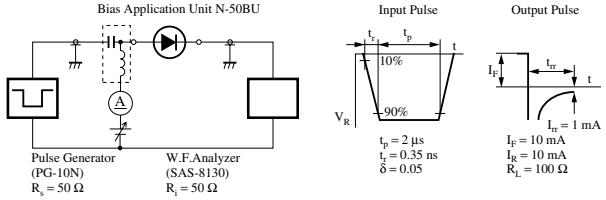
■ Absolute Maximum Ratings $T_a = 25°C$

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_{stg}	−55 to +125	°C

■ Electrical Characteristics $T_a = 25°C$

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

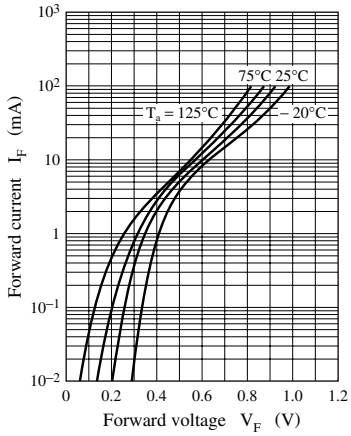


■ Cathode Indication

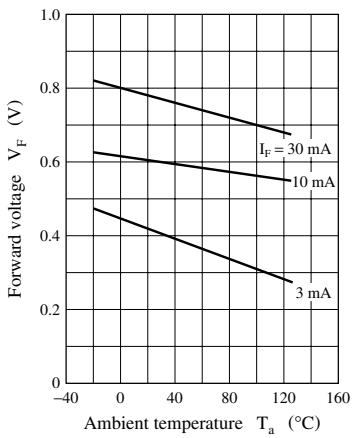
Type No.		MA2C700	MA2C700A
Color	1st Band	Silver	Silver
	2nd Band	—	Green

Common characteristics charts

I_F — V_F

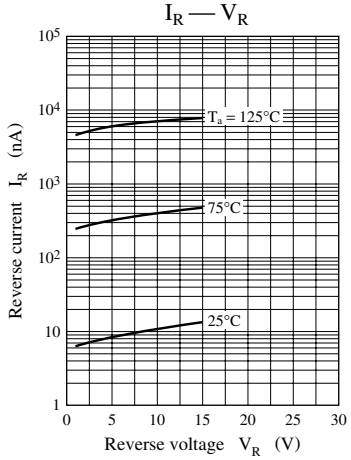


V_F — T_a

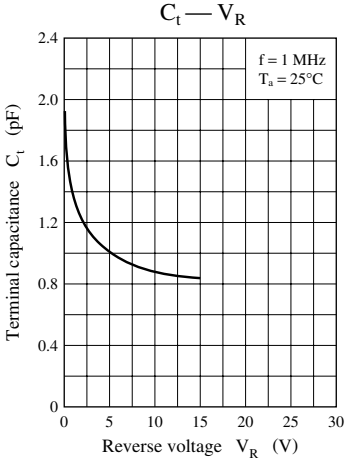


Characteristics charts of MA2C700

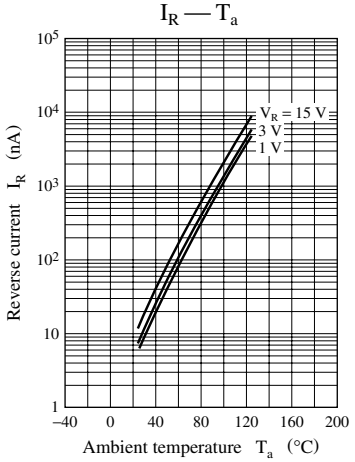
I_R — V_R



C_t — V_R

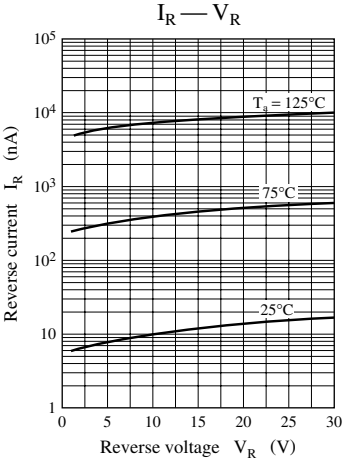


I_R — T_a

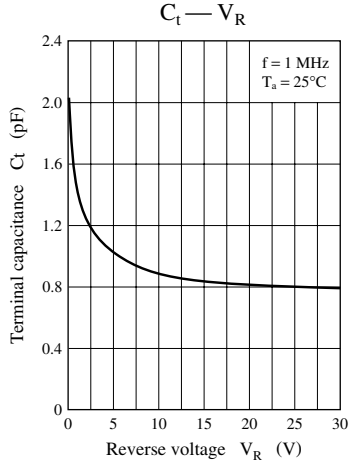


Characteristics charts of MA2C700A

I_R — V_R



C_t — V_R



I_R — T_a