

MA700, MA700A

Silicon epitaxial planer type

For ordinary wave detection

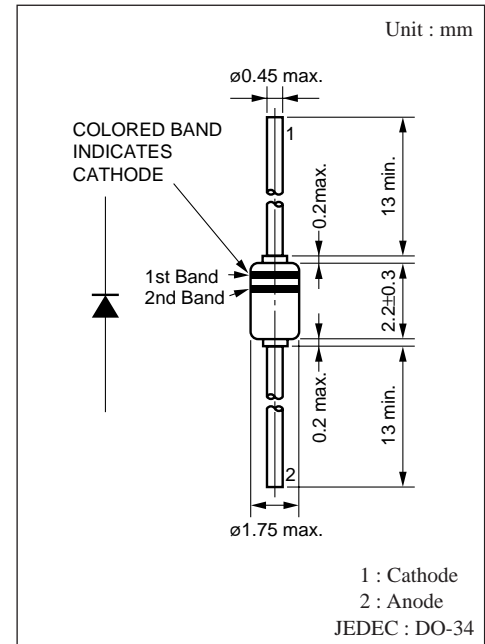
For super high speed switching

■ Features

- Low forward rise voltage V_F and satisfactory wave detection efficiency
- Temperature coefficient of forward characteristic is small.
- Extremely low reverse current I_R
- DO-34 (DHD) envelope, enabling 5mm pitch insertion

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	MA700	15	V
	MA700A	30	
Peak reverse voltage	MA700	15	V
	MA700A	30	
Peak forward current	I_{FM}	150	mA
Forward current (DC)	I_F	30	mA
Junction temperature	T_j	125	A
Storage temperature	T_{stg}	- 55 to + 125	$^\circ\text{C}$



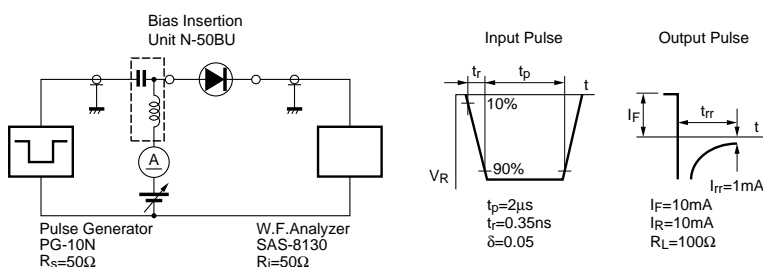
■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	MA700	$V_R = 15\text{V}$			100	nA
	MA700A	$V_R = 30\text{V}$			150	
Forward voltage (DC)	V_{F1}	$I_F = 1\text{mA}$			0.4	V
	V_{F2}	$I_F = 30\text{mA}$			1	V
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	$V_{in} = 3V_{(peak)}, f = 30\text{MHz}$ $R_L = 3.9k\Omega, C_L = 10\text{pF}$		60		%

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

2. Rated input/output frequency : 2000MHz

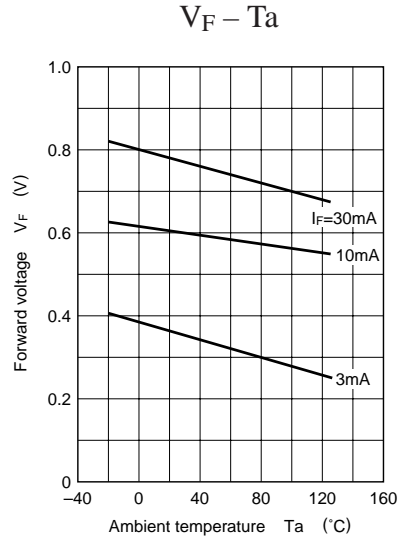
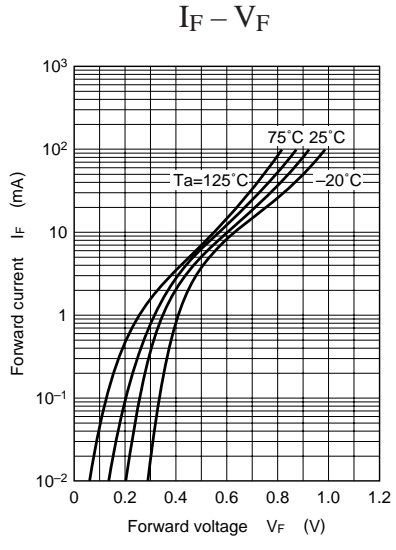
3. * t_{rr} measuring circuit



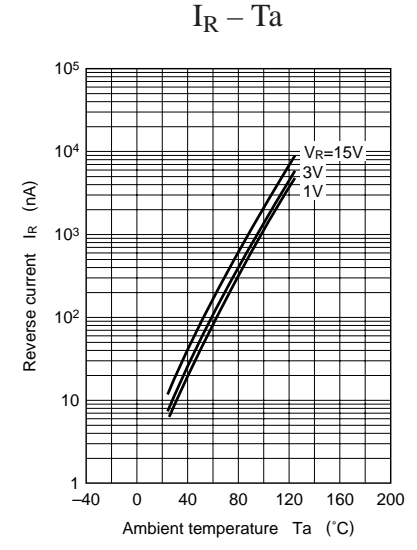
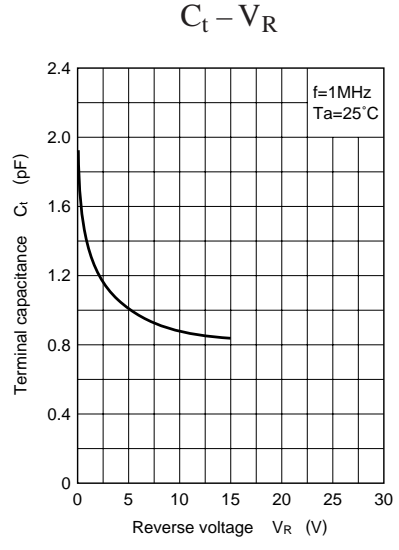
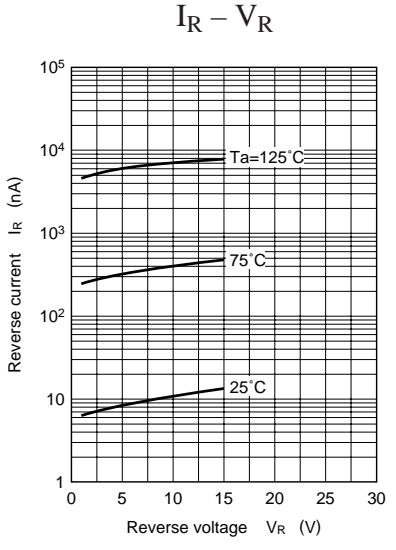
■ Cathode Indication

Type No.	MA700	MA700A
Color	1st Band 2nd Band	Silver — Green

Common characteristics chart



Characteristics chart of MA700



Characteristics chart of MA700A

