

MA3X704, MA3X704A (MA704, MA704A)

Silicon epitaxial planar type

For switching

For wave detection

■ Features

- Low forward voltage V_F and good wave detection efficiency η
- Small temperature coefficient of forward characteristic
- Small reverse current I_R
- Mini type 3-pin package

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

Parameter	Symbol	Rating	Unit	
Reverse voltage (DC)	MA3X704	V_R	15	V
	MA3X704A		30	
Peak reverse voltage	MA3X704	V_{RM}	15	V
	MA3X704A		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	$^\circ\text{C}$	

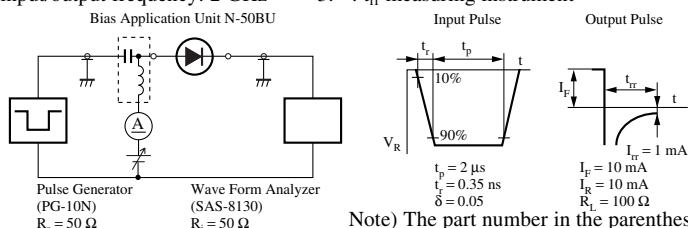
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	MA3X704	$V_R = 15\text{ V}$			200	nA
	MA3X704A	$V_R = 30\text{ V}$			300	
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	$V_R = 1\text{ V}, f = 1\text{ MHz}$		1.5		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	$V_{in} = 3\text{ V}_{(peak)}, f = 30\text{ MHz}$ $R_L = 3.9\text{ k}\Omega, C_L = 10\text{ pF}$		65		%

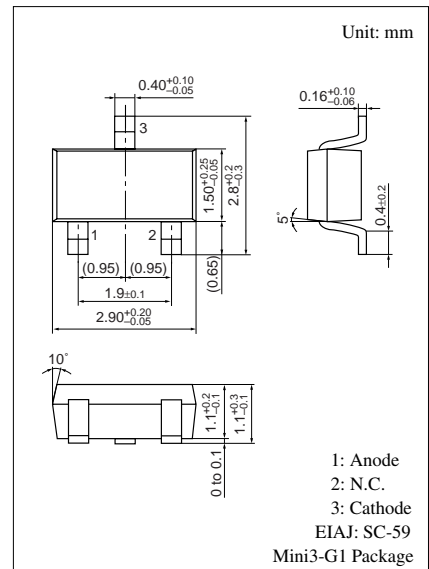
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 2 GHz

3. *: t_{rr} measuring instrument



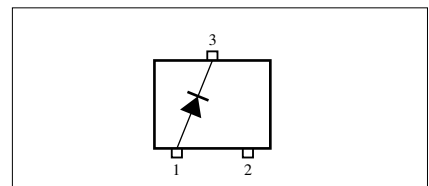
Note) The part number in the parenthesis shows conventional part number.



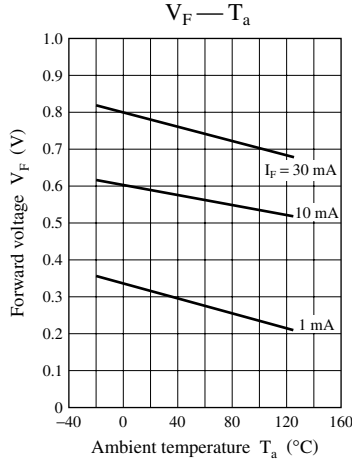
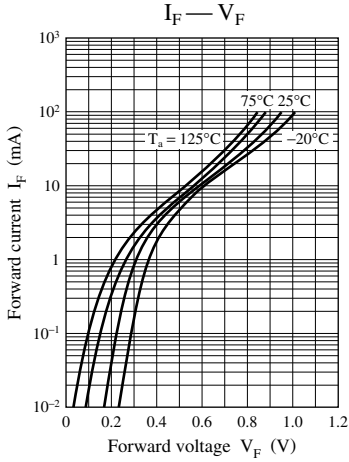
Marking Symbol

- MA3X704: M1K
- MA3X704A: M1L

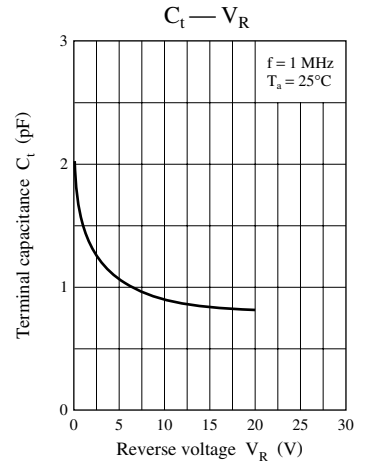
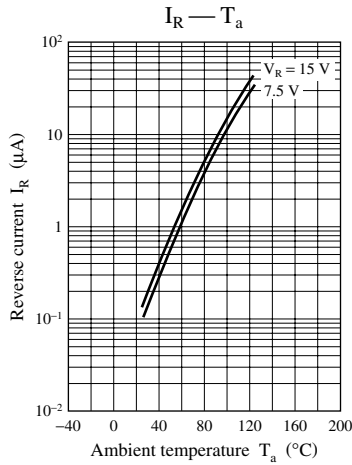
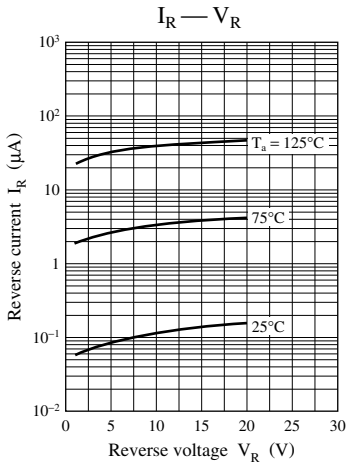
Internal Connection



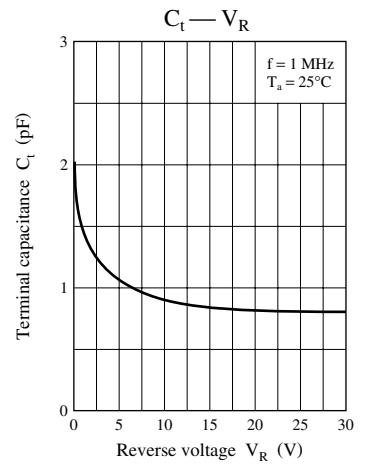
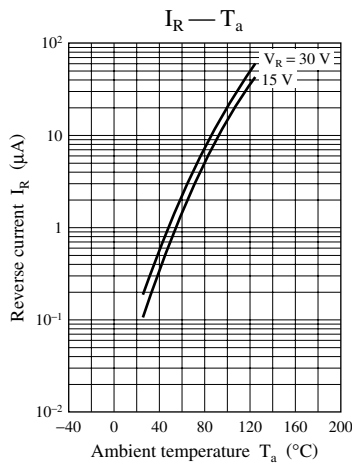
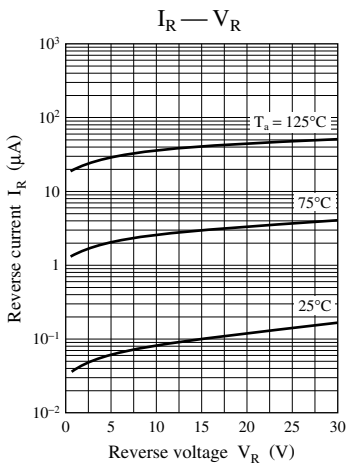
Characteristics charts common to all



Characteristics charts of MA3X704



Characteristics charts of MA3X704A



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