# MA3X704D, MA3X704E (MA704WA, MA704WK)

## Silicon epitaxial planar type

For switching

For wave detection

#### Features

- Two MA3X704A (MA704A) is contained in one package
- Low forward voltage V<sub>F</sub> and good wave detection efficiency η
- Small temperature coefficient of forward characteristic
- Small reverse current I<sub>R</sub>
- Mini type 3-pin package

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter		Symbol	Rating	Unit
Reverse voltage (DC)		$V_R$	30	V
Peak reverse voltage	Single	$I_{FM}$	150	mA
	Double *		110	
Forward current (DC)	Single	$I_F$	30	mA
	Double *		20	
Junction temperature		T <sub>j</sub>	125	°C
Storage temperature		$T_{stg}$	-55 to +125	°C

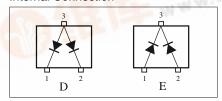
Note) \*: Value per chip

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#### Marking Symbol

• MA3X704D: M2P • MA3X704E: M2R

#### Internal Connection



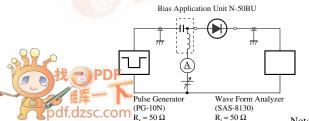
### ■ Electrical Characteristics T<sub>a</sub> = 25°C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30 \text{ V}$			1	μΑ
Forward voltage (DC)	$V_{F1}$	$I_F = 1 \text{ mA}$			0.4	V
	$V_{F2}$	$I_F = 30 \text{ mA}$			1.0	
Terminal capacitance	$C_{t}$	V <sub>R</sub> = 1 V, f = 1 MHz		1.5	- 4	pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R = 10 \text{ mA}$ $I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$		1.0		ns
Detection efficiency	η	$V_{in} = 3 V_{(peak)}$ , $f = 30 MHz$ $R_L = 3.9 k\Omega$ , $C_L = 10 pF$		65		%

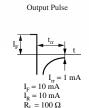
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 2 GHz

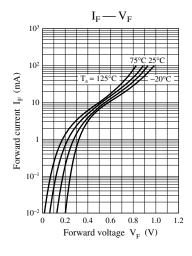
3. \*: t<sub>rr</sub> measuring instrument

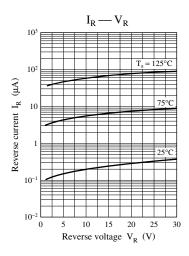


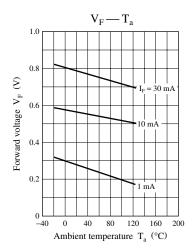


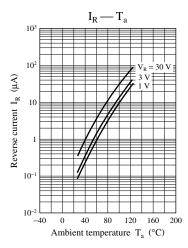


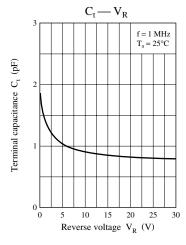
Note) The part number in the parenthesis shows conventional part number.











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