# MA3X704D, MA3X704E (MA704WA, MA704WK)

# Silicon epitaxial planar type

For switching

For wave detection

## Features

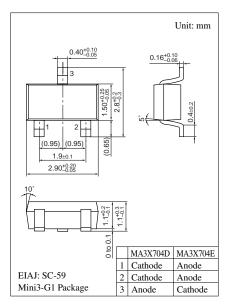
- Two MA3X704A (MA704A) is contained in one package
- $\bullet$  Low forward voltage  $V_F$  and good wave detection efficiency  $\eta$
- Small temperature coefficient of forward characteristic
- Small reverse current  $I_R$
- Mini type 3-pin package

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

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

Note) \*: Value per chip

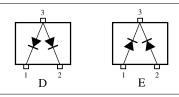
## Electrical Characteristics $T_a = 25^{\circ}C$



#### Marking Symbol

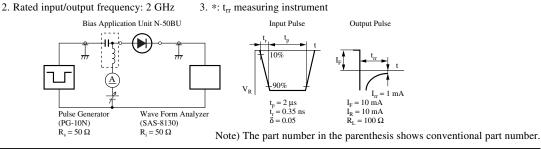
#### • MA3X704D: M2P • MA3X704E: M2R

#### Internal Connection



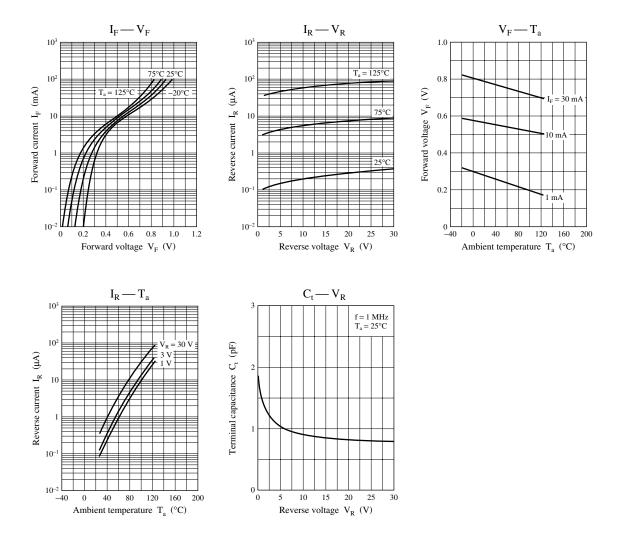
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I <sub>R</sub>	$V_R = 30 V$			1	μΑ
Forward voltage (DC)	V <sub>F1</sub>	$I_F = 1 \text{ mA}$			0.4	V
	V <sub>F2</sub>	$I_F = 30 \text{ mA}$			1.0	
Terminal capacitance	Ct	$V_R = 1 V, f = 1 MHz$		1.5		pF
Reverse recovery time *	t <sub>rr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

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.



# MA3X704D, MA3X704E

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