

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number:	MA3X704A0L
Manufacturer:	Panasonic Electronic Components
Package:	TO-236-3, SC-59, SOT-23-3
Availability:	Please confirm with sales

Product Page:

<https://antrexco.com/product/details/panasonic-electronic-components/ma3x704a0l.html>

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Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

MA3X704 (MA704), MA3X704A (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

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

Parameter		Symbol	Rating	Unit
Reverse voltage	MA3X704	V_R	15	V
	MA3X704A		30	
Maximum peak reverse voltage	MA3X704	V_{RM}	15	V
	MA3X704A		30	
Peak forward current		I_{FM}	150	mA
Forward current		I_F	30	mA
Junction temperature		T_j	125	°C
Storage temperature		T_{stg}	-55 to +125	°C

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

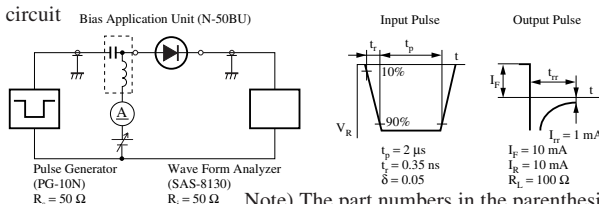
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F = 1\text{ mA}$			0.4	V
	V_{F2}	$I_F = 30\text{ mA}$			1.0	
Reverse current	MA3X704 MA3X704A	I_R	$V_R = 15\text{ V}$		200	nA
			$V_R = 30\text{ V}$		300	
Terminal capacitance	C_t	$V_R = 1\text{ V}, f = 1\text{ MHz}$		1.5		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 10\text{ mA}$ $I_{rr} = 1\text{ mA}, R_L = 100\ \Omega$		1.0		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. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

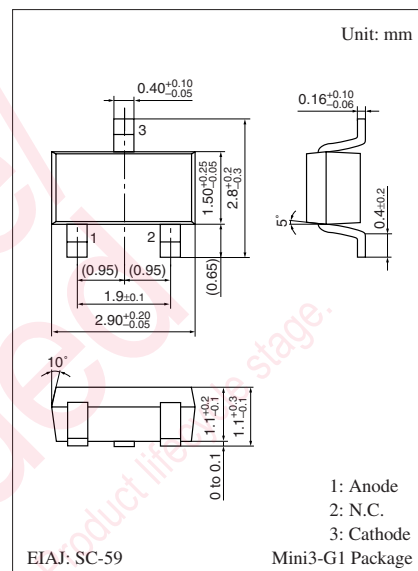
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. Absolute frequency of input and output is 2 GHz.

4. *: t_{rr} measurement circuit



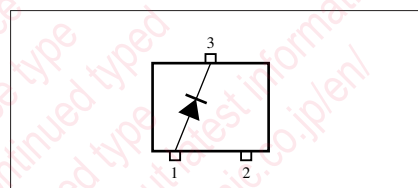
Note) The part numbers in the parenthesis show conventional part number.



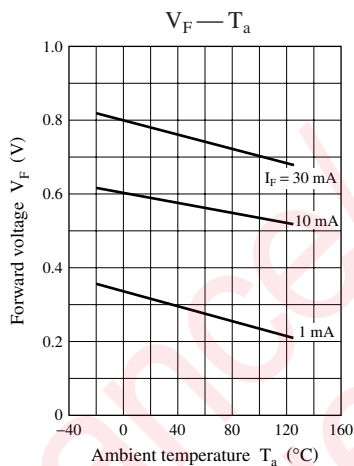
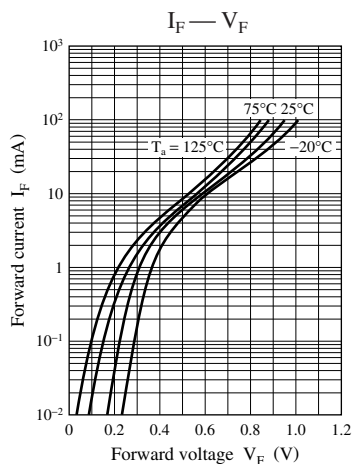
Marking Symbol

- MA3X704: M1K
- MA3X704A: M1L

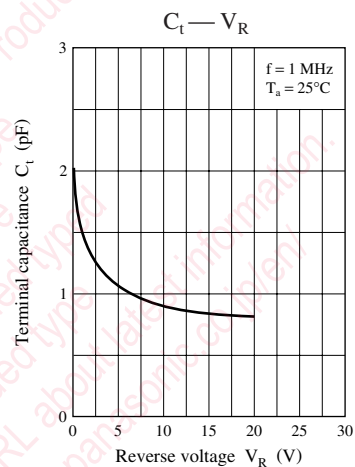
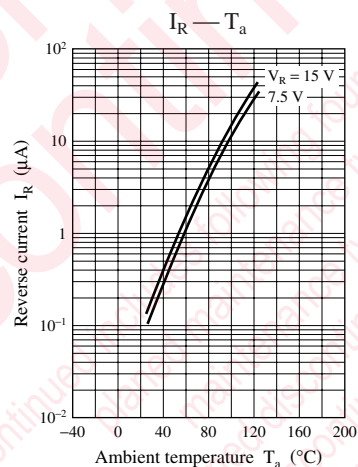
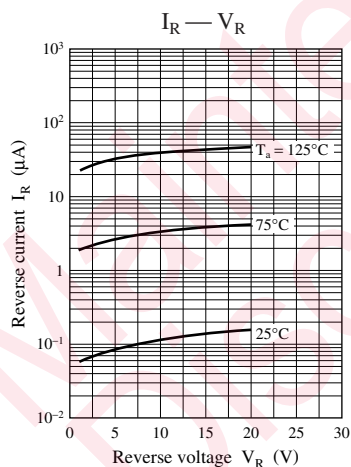
Internal Connection



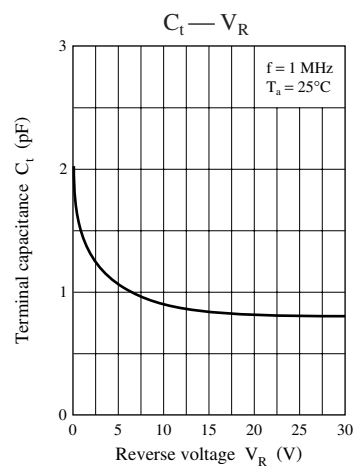
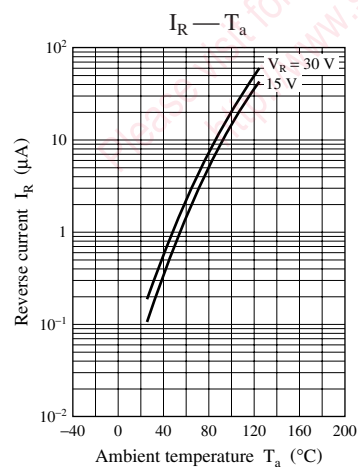
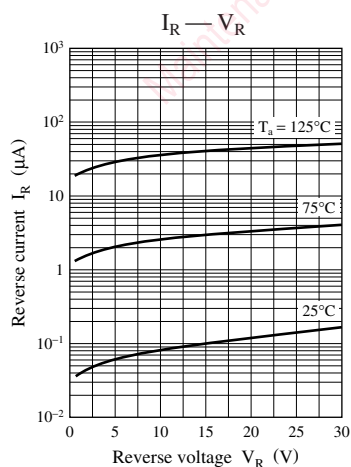
Common characteristics charts



Characteristics charts of MA3X704



Characteristics charts of MA3X704A



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