# **MA3X717** (MA717)

### Silicon epitaxial planar type

For switching

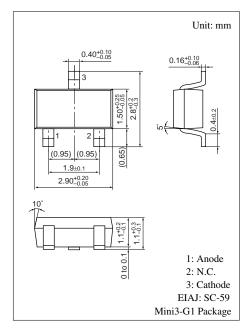
For wave detection

#### ■ Features

- Low forward voltage V<sub>F</sub>, optimum for low voltage rectification
- Low V<sub>F</sub> type of MA3X704A (MA704A)
- Optimum for high frequency rectification because of its short reverse recovery time (t<sub>rr</sub>)
- Mini type 3-pin package

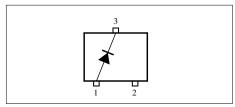
#### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	30	V
Peak forward current	$I_{FM}$	150	mA
Forward current (DC)	$I_{\mathrm{F}}$	30	mA
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C



Marking Symbol: M2M

Internal Connection



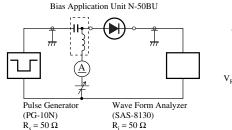
### ■ Electrical Characteristics $T_a = 25$ °C

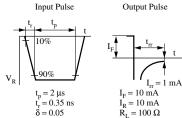
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30 \text{ V}$			30	μΑ
Forward voltage (DC)	V <sub>F1</sub>	$I_F = 1 \text{ mA}$			0.3	V
	$V_{F2}$	$I_F = 30 \text{ mA}$			1.0	
Terminal capacitance	C <sub>t</sub>	$V_R = 1 \text{ V, } f = 1 \text{ MHz}$		1.5		pF
Reverse recovery 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.

2. Rated input/output frequency: 2 GHz

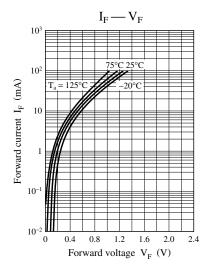
3. \*:  $t_{rr}$  measuring instrument

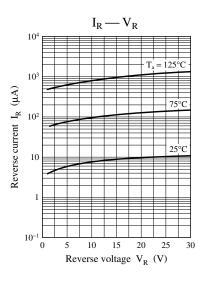


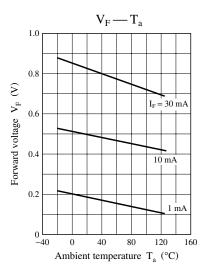


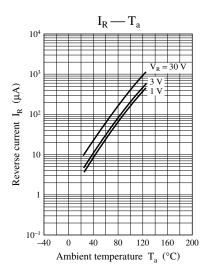
Note) The part number in the parenthesis shows conventional part number.

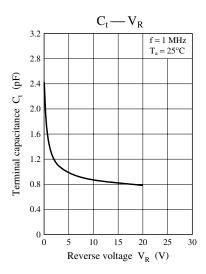
MA3X717 Panasonic











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