MA3J745 (MA745)

Silicon epitaxial planar type

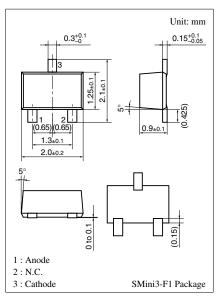
For switching

■ Features

- Low forward voltage V_F , optimum for low voltage rectification
- Low V_F type of MA3X704A (MA704A)
- Optimum for high frequency rectification because of its short reverse recovery time (t_{rr})
- S-Mini type 3-pin package

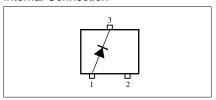
■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	30	V
Peak reverse voltage	V_{RM}	30	V
Forward current (DC)	I_F	30	mA
Peak forward current	I_{FM}	150	mA
Junction temperature	T_{j}	125	°C
Storage temperature	T_{stg}	-55 to +125	°C



Marking Symbol: M2M

Internal Connection



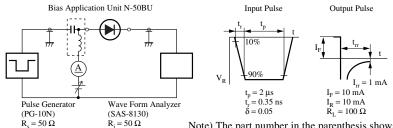
■ Electrical Characteristics $T_a = 25$ °C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I_R	$V_R = 30 \text{ V}$			30	μΑ
Forward voltage (DC)	V _{F1}	$I_F = 1 \text{ mA}$			0.3	V
	V _{F2}	$I_F = 30 \text{ mA}$			1.0	
Terminal capacitance	C _t	$V_R = 1 \text{ V, } f = 1 \text{ MHz}$		1.5		pF
Reverse recovery time *	t _{rr}	$I_F = I_R = 10 \text{ mA}$		1.0		ns
		$I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$				
Detection efficiency	η	$V_{in} = 3 V_{(peak)}$, $f = 30 MHz$		65		%
		$R_L = 3.9 \text{ k}\Omega, C_L = 10 \text{ pF}$				

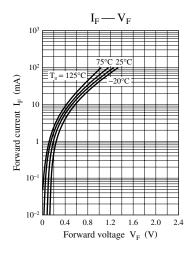
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

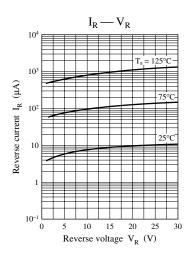
2. Rated input/output frequency: 2 GHz

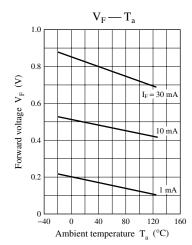
3. *: t_{rr} measuring instrument

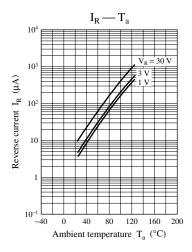


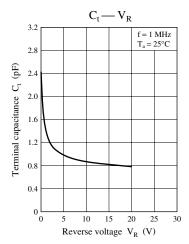
Note) The part number in the parenthesis shows conventional part number.











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