MA3J741 (MA741)

Silicon epitaxial planar type

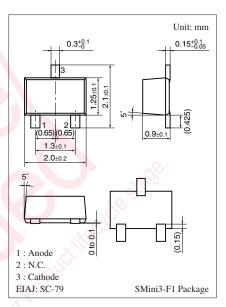
For switching

■ Features

- Mini type of MA3X704A (MA704A)
- Low forward voltage V_F and good wave detection efficiency η
- Small temperature coefficient of forward characteristic
- Small reverse current I_R

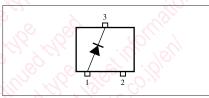
■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Maximum peak reverse voltage	V _{RM}	30	V
Forward current	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: M1L

Internal Connection



■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V_{F1}	$I_F = 1 \text{ mA}$	2/1	<i>y</i>	0.4	V
	V_{F2}	$I_F = 30 \text{ mA}$	7.6		1.0	
Reverse current	I_R	$V_R = 30 \text{ V}$			300	nA
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. 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.

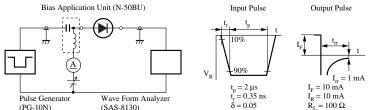
4.*: t_{rr} measurement circuit

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

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

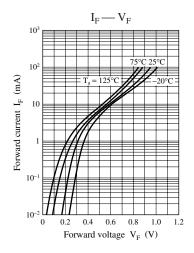
 $R_s = 50 \Omega$

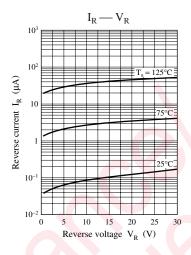
 $R_i = 50 \Omega$

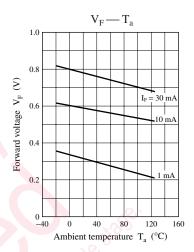


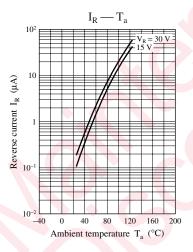
Publication date: April 2004 SKH00054BED 1

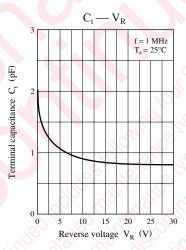
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