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# MA2S372

## Silicon epitaxial planar type

For UHF and VHF electronic tuner

### ■ Features

- Large capacitance ratio
- Small series resistance  $r_D$
- SS-Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	32	V
Maximum peak reverse voltage *	$V_{RM}$	34	V
Forward current	$I_F$	20	mA
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Note) \*:  $R_L = 2.2 \text{ k}\Omega$

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	$I_R$	$V_R = 30 \text{ V}$			10	nA
Diode capacitance	$C_{D(2V)}$	$V_R = 2 \text{ V}, f = 1 \text{ MHz}$	14.220		15.473	pF
	$C_{D(25V)}$	$V_R = 25 \text{ V}, f = 1 \text{ MHz}$	2.132		2.287	
	$C_{D(10V)}$	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$	5.307		6.128	
	$C_{D(17V)}$	$V_R = 17 \text{ V}, f = 1 \text{ MHz}$	2.909		3.411	
Capacitance ratio	$C_{D(2V)}/C_{D(25V)}$		6.22			—
	$C_{D(10V)}/C_{D(17V)}$		1.70		1.96	
Diode capacitance deviation *1	$\Delta C$	$C_{D(2V)(10V)(17V)(25V)}$			2.0	%
Series resistance *2	$r_D$	$C_D = 9 \text{ pF}, f = 470 \text{ MHz}$			0.45	$\Omega$

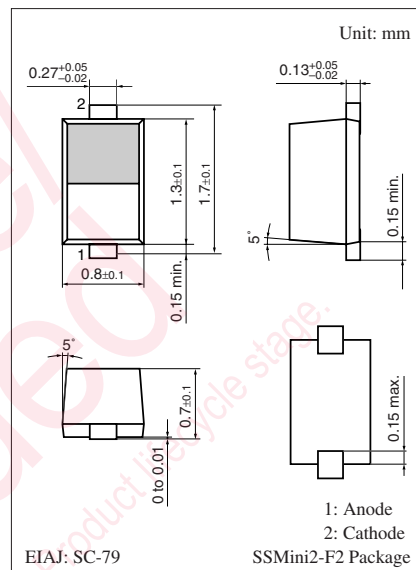
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 470 MHz.

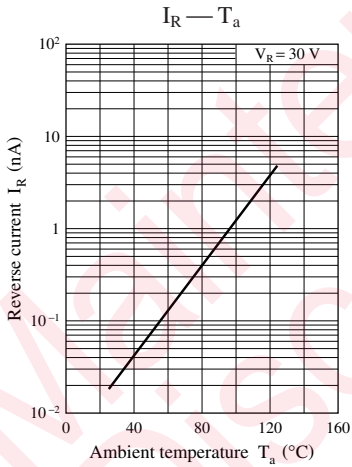
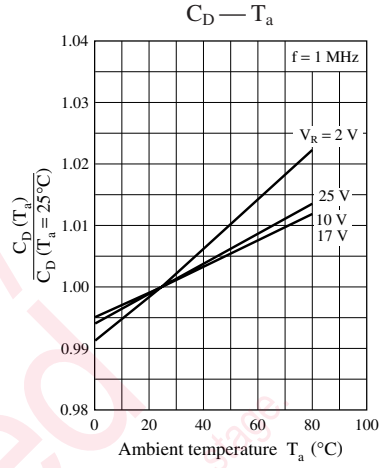
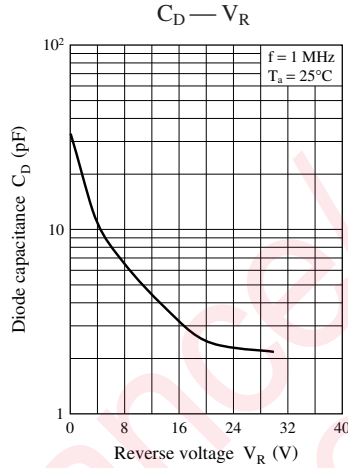
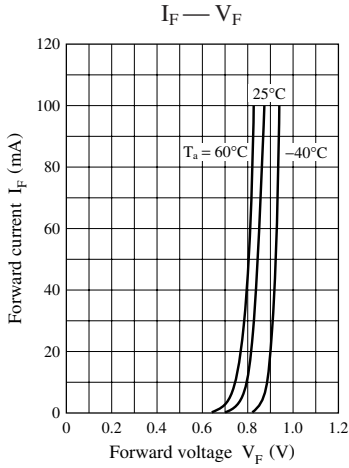
3. \*1: Being matching by selection:

Matching is done at  $V_R = 2 \text{ V}, 10 \text{ V}, 17 \text{ V}, 25 \text{ V}$  and capacitance difference of within to be continuous 20 diodes in the same group at free choice in limited within 2.0%.

\*2: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER



Marking Symbol: L



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