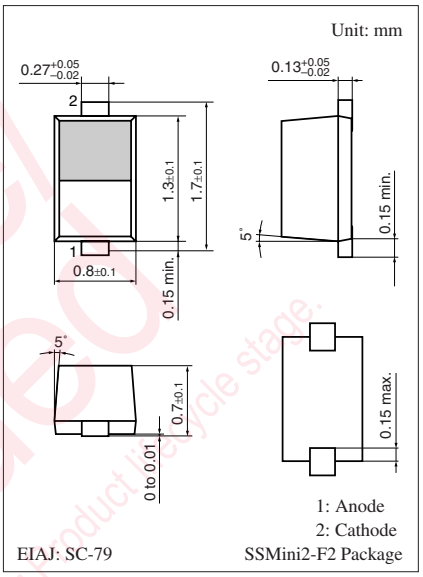
MA2S372

Silicon epitaxial planar type

For UHF and VHF electronic tuner



Marking Symbol: L

■ 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 $T_a = 25°C$

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	°C
Storage temperature	T_{stg}	−55 to +150	°C

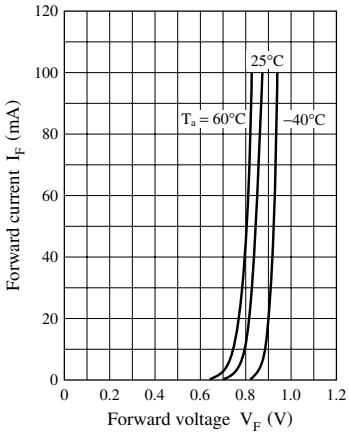
Note) *: $R_L = 2.2$ kΩ

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

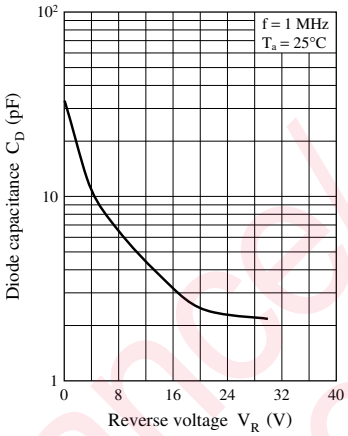
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R = 30$ V			10	nA
Diode capacitance	$C_{D(2V)}$	$V_R = 2$ V, f = 1 MHz	14.220		15.473	pF
	$C_{D(25V)}$	$V_R = 25$ V, f = 1 MHz	2.132		2.287	
	$C_{D(10V)}$	$V_R = 10$ V, f = 1 MHz	5.307		6.128	
	$C_{D(17V)}$	$V_R = 17$ V , f = 1 MHz	2.909		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	ΔC	$C_{D(2V)(10V)(17V)(25V)}$			2.0	%
Series resistance *2	r_D	$C_D = 9$ pF, f = 470 MHz			0.45	Ω

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 $V_R = 2$ V, 10 V, 17 V, 25 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

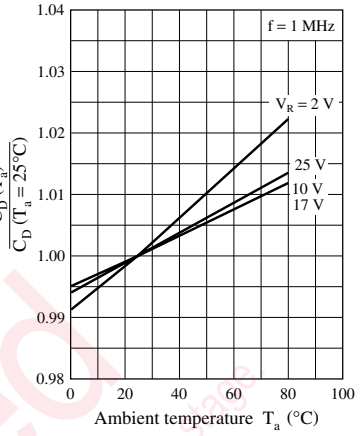
I_F — V_F



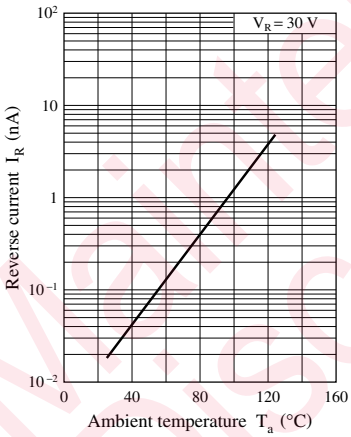
C_D — V_R



C_D — T_a



I_R — T_a



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