

MA2Z365 (MA365)

Silicon epitaxial planar type

For CATV tuner

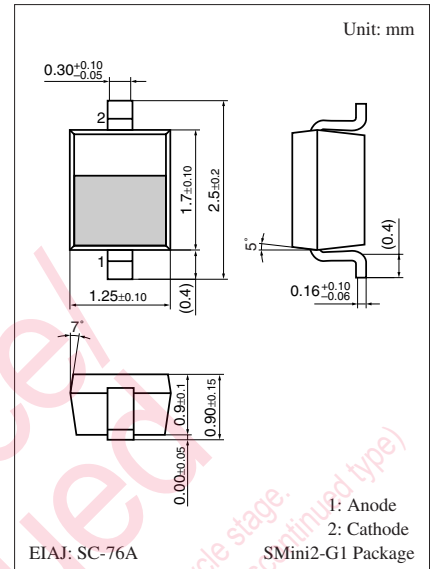
■ Features

- The largest capacitance ratio of 14
- S-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}	35	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) *: $R_L = 10\text{ k}\Omega$



Marking Symbol: 6F

■ 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	$C_{D(2V)}$	$V_R = 2\text{ V}, f = 1\text{ MHz}$	36.00		42.59	pF
	$C_{D(25V)}$	$V_R = 25\text{ V}, f = 1\text{ MHz}$	2.54		3.08	
	$C_{D(10V)}$	$V_R = 10\text{ V}, f = 1\text{ MHz}$	8.00		11.31	
	$C_{D(17V)}$	$V_R = 17\text{ V}, f = 1\text{ MHz}$	3.40		4.63	
Capacitance ratio	$C_{D(2V)} / C_{D(25V)}$		13	14		—
Diode capacitance deviation *1	ΔC	$C_{D(2V)}(10V)(17V)(25V)$			2.5	%
Series resistance *2	r_D	$C_D = 9\text{ pF}, f = 470\text{ MHz}$			0.85	Ω

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

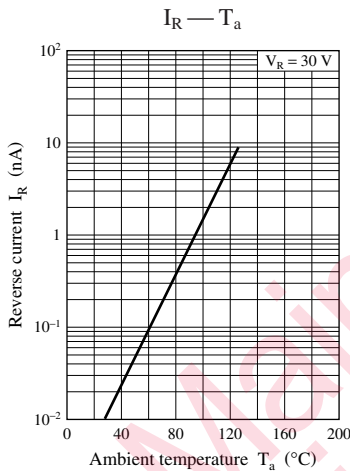
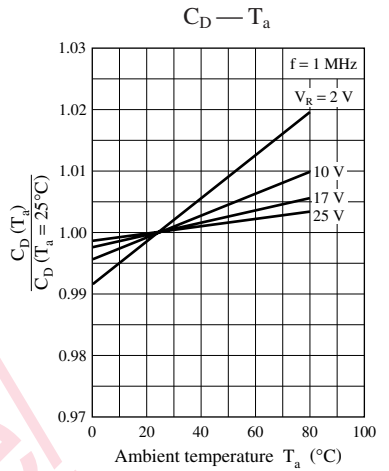
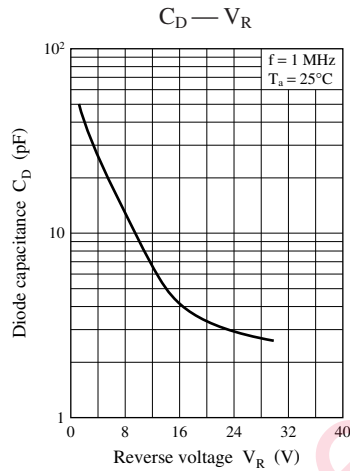
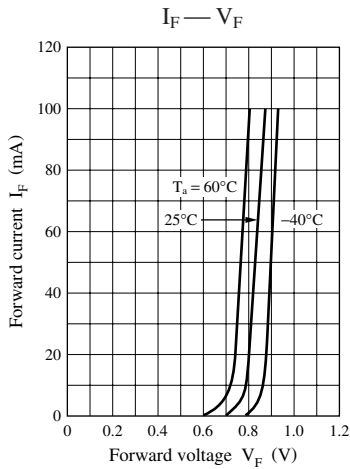
2. Absolute frequency of input and output is 470 MHz.

3. *1: Being matching by selection :

Matching is done at $V_R = 2\text{ V}, 10\text{ V}, 17\text{ V}, 25\text{ V}$ and capacitance difference of one group diode is limited within 2.5 %.

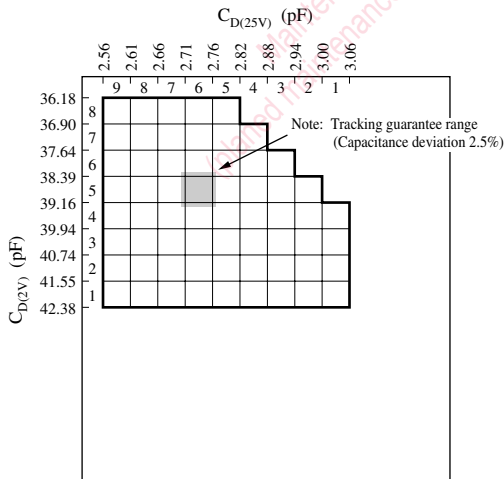
*2: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER

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

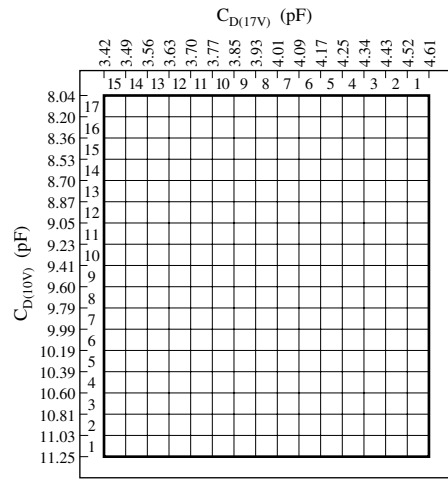


C_D rank classification

Primary rank classification



Secondary rank classification



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