

# MA2Z374 (MA374)

## Silicon epitaxial planar type

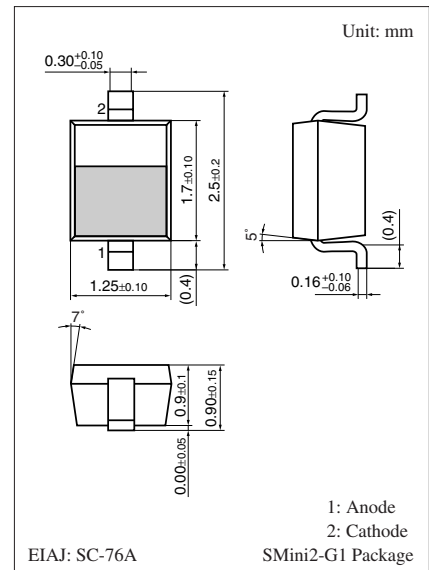
For CATV tuner

### ■ Features

- 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	$V_R$	34	V
Maximum peak reverse voltage *	$V_{RM}$	35	V
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: 7A

### ■ 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	$C_{D(0V)}$ *3	$V_R = 0\text{ V}, f = 1\text{ MHz}$	87			pF
	$C_{D(2V)}$	$V_R = 2\text{ V}, f = 1\text{ MHz}$	44.00		50.79	
	$C_{D(25V)}$	$V_R = 25\text{ V}, f = 1\text{ MHz}$	2.60		3.03	
	$C_{D(10V)}$	$V_R = 10\text{ V}, f = 1\text{ MHz}$	8.80		13.08	
	$C_{D(17V)}$	$V_R = 17\text{ V}, f = 1\text{ MHz}$	3.70		5.04	
Capacitance ratio	$C_{D(2V)}/C_{D(25V)}$		15.0			—
Diode capacitance deviation *1	$\Delta C$	$C_{D(2V)(10V)(17V)(25V)}$			2.0	%
Series resistance *2	$r_D$	$C_D = 9\text{ pF}, f = 470\text{ MHz}$			0.9	$\Omega$

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.

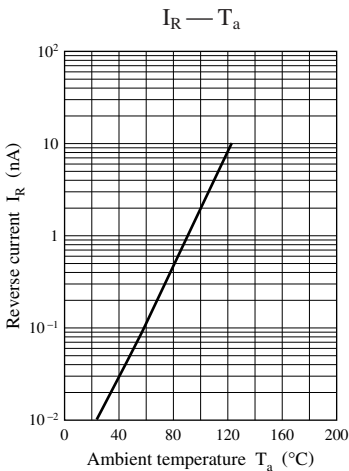
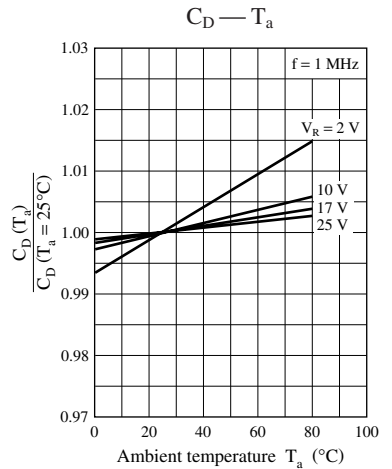
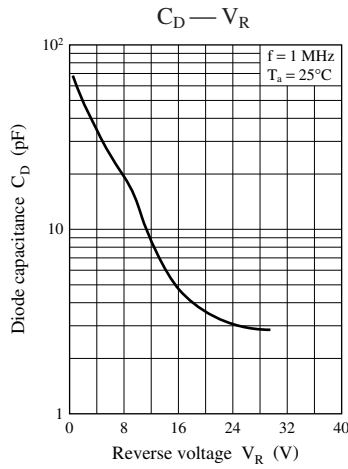
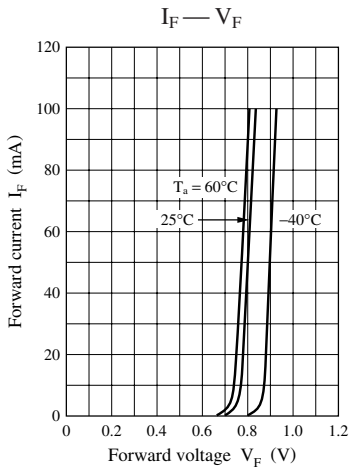
3. \*1: Being matching by selection:

Matching is done at  $V_R = 2\text{ V}, 10\text{ V}, 17\text{ V}, 25\text{ V}$  and capacitance difference of one group diode is limited within 2.0%.

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

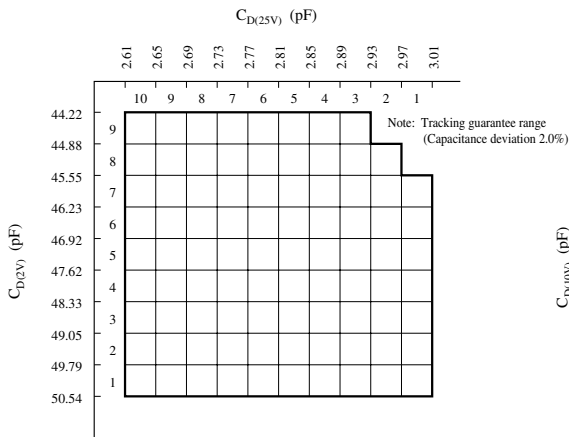
\*3: Measurement at low signal level

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

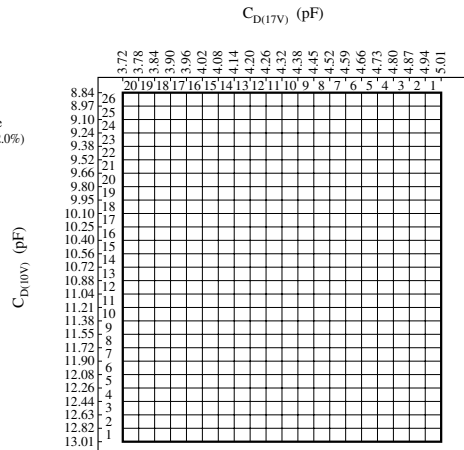


**$C_D$  rank classification**

**Primary rank classification**



**Secondary rank classification**



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