

# MA2S357

## Silicon epitaxial planar type

For CATV tuner

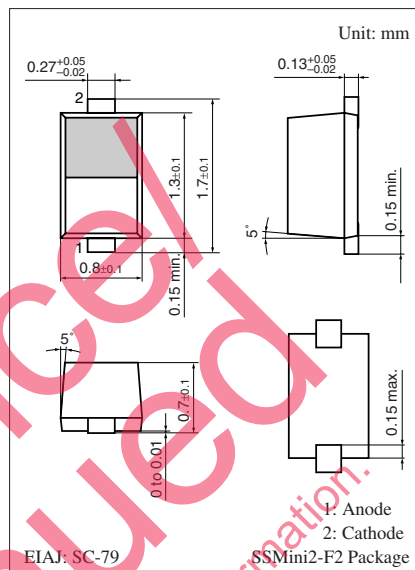
### ■ Features

- 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	$V_R$	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: N

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

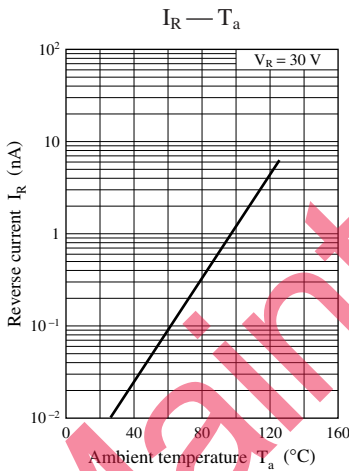
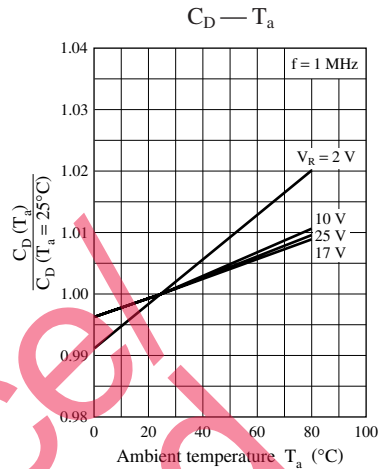
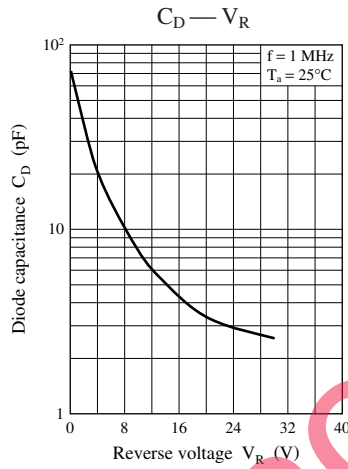
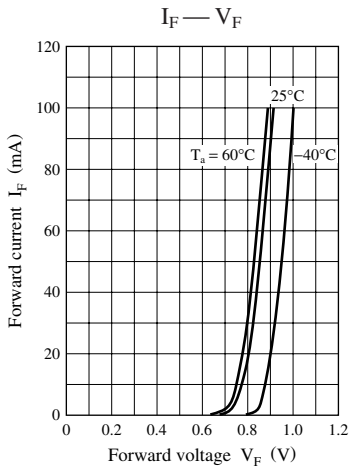
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	$I_R$	$V_R = 30\text{ V}$			10	nA
Diode capacitance	$C_{D(0V)}$ *1	$V_R = 0\text{ V}, f = 1\text{ MHz}$	58.0			pF
	$C_{D(2V)}$	$V_R = 2\text{ V}, f = 1\text{ MHz}$	29.00		34.30	
	$C_{D(25V)}$	$V_R = 25\text{ V}, f = 1\text{ MHz}$	2.53		2.92	
	$C_{D(10V)}$	$V_R = 10\text{ V}, f = 1\text{ MHz}$	6.40		8.32	
	$C_{D(17V)}$	$V_R = 17\text{ V}, f = 1\text{ MHz}$	3.50		4.35	
Capacitance ratio	$C_{D(2V)} / C_{D(25V)}$		11.0			—
Diode capacitance deviation	$\Delta C$	$C_{D(2V)}(10V)(17V)(25V)$			2.0	%
Series resistance *2	$r_D$	$C_D = 9\text{ pF}, f = 470\text{ MHz}$			0.54	$\Omega$

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: Measurement at Low signal level

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



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