# **MA2S357**

## Silicon epitaxial planar type

#### For CATV tuner

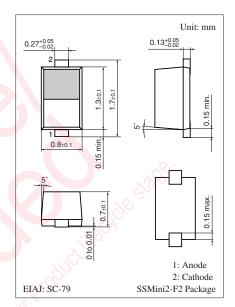
#### ■ Features

- Large capacitance ratio
- Small series resistance r<sub>D</sub>
- 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 <sub>R</sub>	34	V	
Maximum peak reverse voltage *	$V_{RM}$	35	V	
Junction temperature	T <sub>j</sub>	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	

Note) \*:  $R_L = 10 \text{ k}\Omega$ 



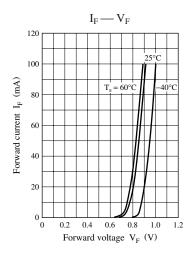
Marking Symbol: N

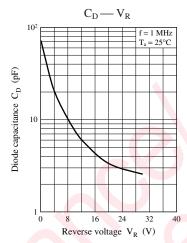
#### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

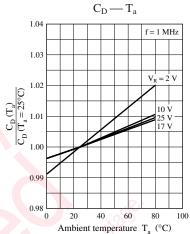
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current	$I_R$	$V_R = 30 \text{ V}$	100	0,	10	nA
Diode capacitance	C <sub>D(0V)</sub> *1	$V_R = 0 V, f = 1 MHz$	58.0	)-		pF
	C <sub>D(2V)</sub>	$V_R = 2 V, f = 1 MHz$	29.00		34.30	
	C <sub>D(25V)</sub>	$V_R = 25 \text{ V}, f = 1 \text{ MHz}$	2.53		2.92	
	C <sub>D(10V)</sub>	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$	6.40		8.32	
	C <sub>D(17V)</sub>	$V_R = 17 \text{ V}, f = 1 \text{ MHz}$	3.50		4.35	
Capacitance ratio	C <sub>D(2V)</sub> /C <sub>D(25V)</sub>	ish why	11.0			_
Diode capacitance deviation	ΔC	$C_{D(2V)(10V)(17V)(25V)}$			2.0	%
Series resistance *2	$r_{\mathrm{D}}$	$C_D = 9 \text{ pF, f} = 470 \text{ MHz}$			0.54	Ω

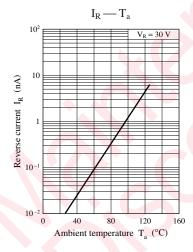
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

- 2. Absolute frequency of input and output is 470 MHz.
- 3. \*1: Measurement at Low signal level
  - \*2: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER









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