

MA2S357

Silicon epitaxial planar type

For CATV tuner

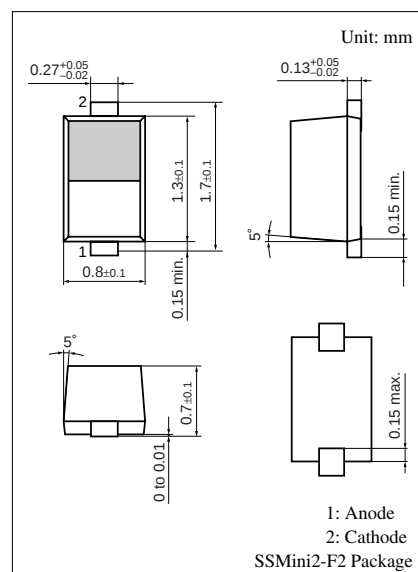
■ Features

- 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 (DC)	V_R	34	V
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) *: $R_L = 10\text{ k}\Omega$



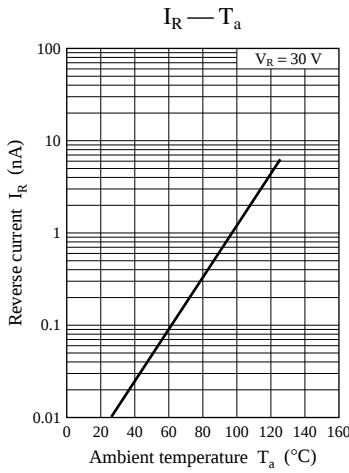
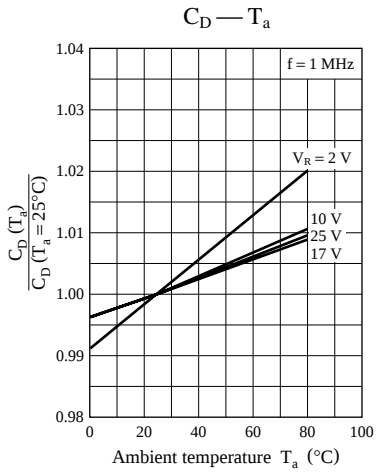
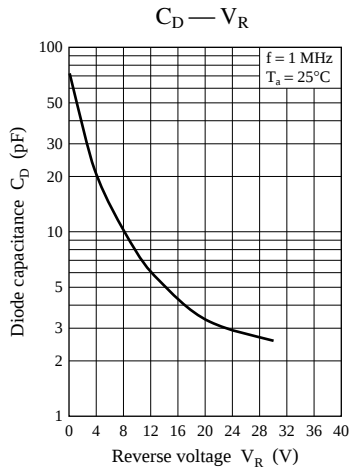
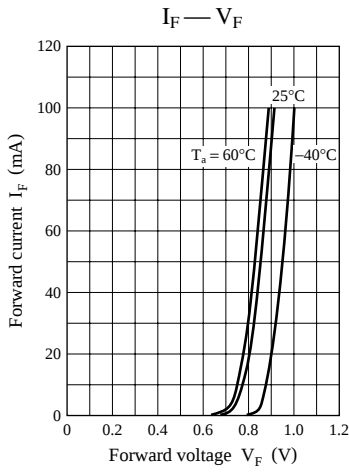
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	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	ΔC	$C_{D(2V)(10V)(17V)(25V)}$			2.0	%
Series resistance *2	r_D	$C_D = 9\text{ pF}, f = 470\text{ MHz}$			0.54	Ω

Note) 1. Rated input/output frequency: 470 MHz

2. *1: Measurement at Low Signal Level

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



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