

MA357J

Silicon epitaxial planer type

For CATV tuner

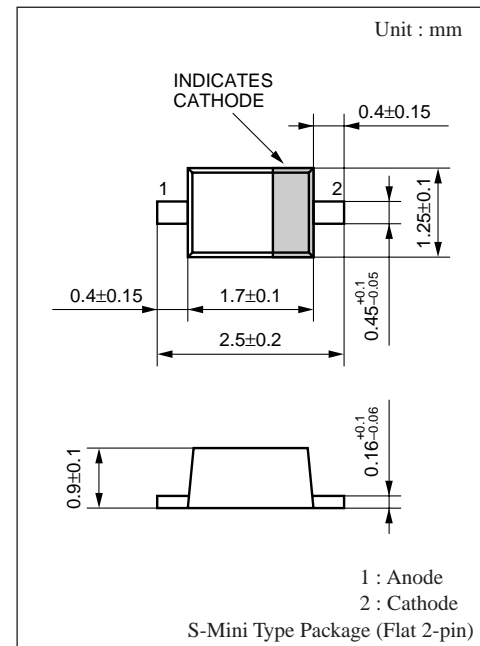
■ Features

- Large capacity variation ratio
- Small series resistance r_D

■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	34	V
Peak reverse voltage	V_{RM}^*	35	V
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	- 55 to +150	°C

* $R_L=10k\Omega$



Marking Symbol : 7K

■ Electrical Characteristics (Ta= 25°C)

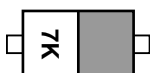
Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R= 30V$			10	nA
Diode capacitance	$C_{D(0V)}^{*2}$	$V_R= 0V, f= 1MHz$	58.0			pF
	$C_{D(2V)}$	$V_R= 2V, f= 1MHz$	29.00		34.30	pF
	$C_{D(25V)}$	$V_R= 25V, f= 1MHz$	2.53		2.92	pF
	$C_{D(10V)}$	$V_R= 10V, f= 1MHz$	6.40		8.32	pF
	$C_{D(17V)}$	$V_R= 17V, f= 1MHz$	3.50		4.35	pF
Capacitance ratio	$C_{D(2V)}/C_{D(25V)}$		11.0			—
Diode capacitance deviation	ΔC	$C_{D(2V)}(10V)(17V)(25V)$			2.0	%
Series resistance	r_D^{*1}	$C_D= 9pF, f= 470MHz$			0.54	Ω

Note 1. Rated input/output frequency : 470MHz

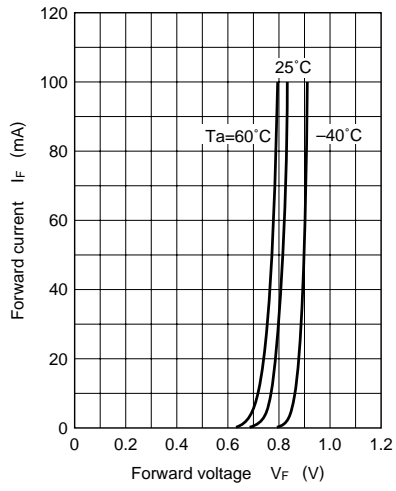
2. $*1$: r_D measurement device : YHP MODEL 4191A RF IMPEDANCE ANALYZER

3. $*2$: Low Signal Level

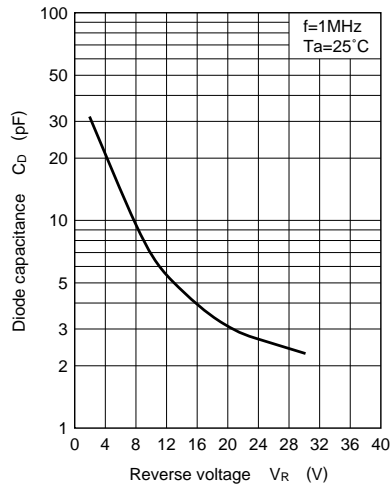
■ Marking



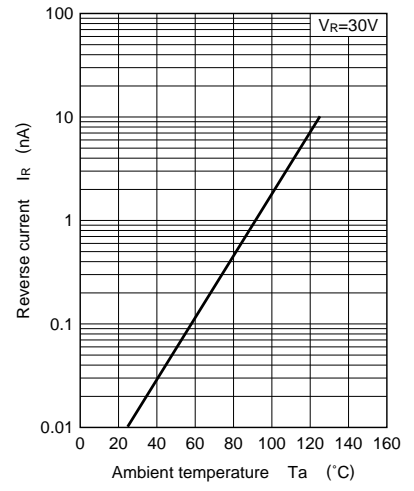
$I_F - V_F$



$C_D - V_R$



$I_R - T_a$



$C_D - T_a$

