

MA2Z357 (MA357)

Silicon epitaxial planar type

For CATV tuner

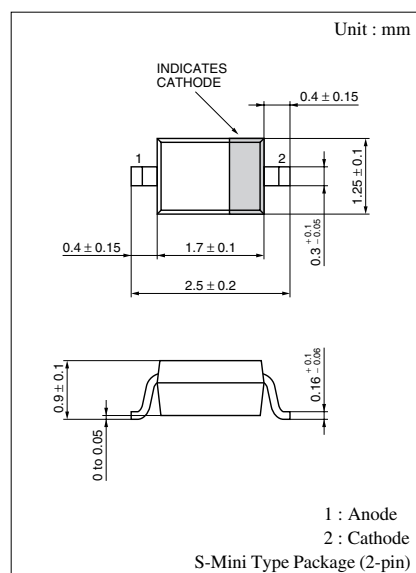
■ Features

- Large capacitance ratio
- Small series resistance r_D

■ 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) * : $R_L = 10\text{ k}\Omega$



Marking Symbol: 7K

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

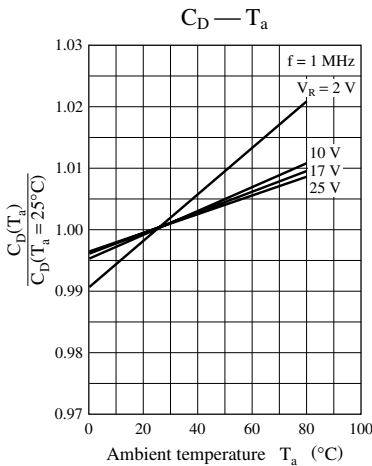
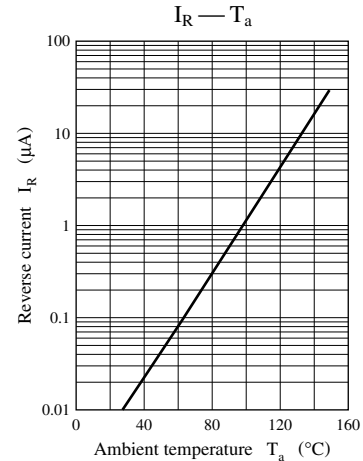
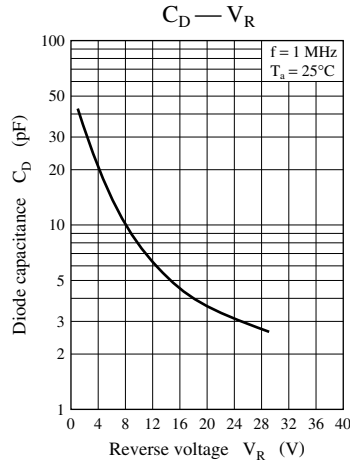
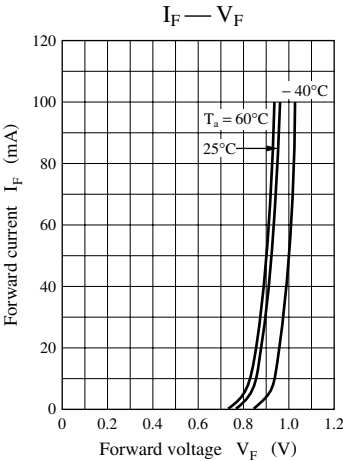
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 30\text{ V}$			10	nA
Diode capacitance	$C_{D(0V)}^{*1}$	$V_R = 0\text{ V}, f = 1\text{ MHz}$	58.0			pF
	$C_{D(2V)}$	$V_R = 2\text{ V}, f = 1\text{ MHz}$	29.00		34.30	pF
	$C_{D(25V)}$	$V_R = 25\text{ V}, f = 1\text{ MHz}$	2.53		2.92	pF
	$C_{D(10V)}$	$V_R = 10\text{ V}, f = 1\text{ MHz}$	6.40		8.32	pF
	$C_{D(17V)}$	$V_R = 17\text{ V}, f = 1\text{ MHz}$	3.50		4.35	pF
Capacitance ratio	$C_{D(2V)}/C_{D(25V)}$		11.0			—
Diode capacitance deviation	ΔC	$C_{D(2V)}/C_{D(10V)}/C_{D(17V)}/C_{D(25V)}$			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

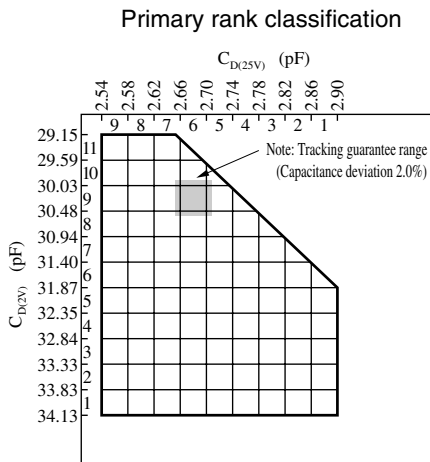
2. *1 : Measurement at Low Signal Level

*2 : r_f measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER

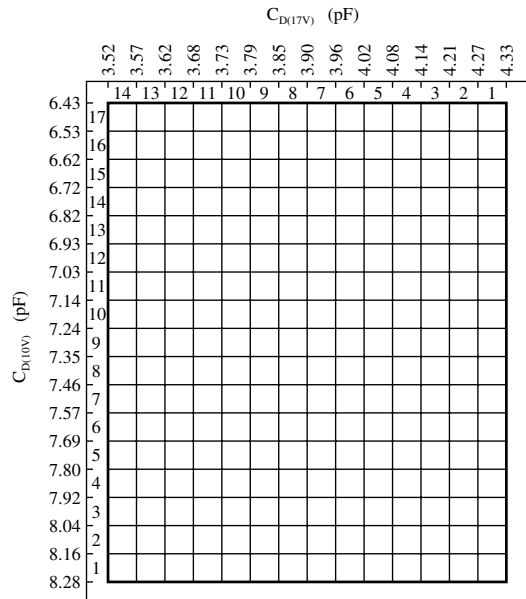
Note) The part number in the parenthesis shows conventional part number.



C_D rank classification



Secondary rank classification



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