

MA2X338 (MA338)

Silicon epitaxial planar type

For CATV tuner

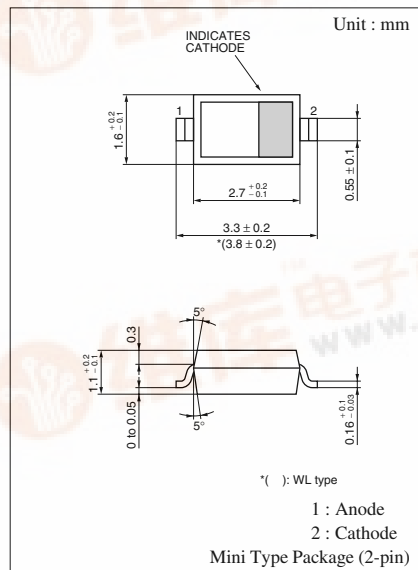
■ Features

- Large capacitance ratio
- Small series resistance r_D , resulting in obtaining high performance index, Q of a circuit

■ 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
Forward current (DC)	I_F	20	mA
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: 6H

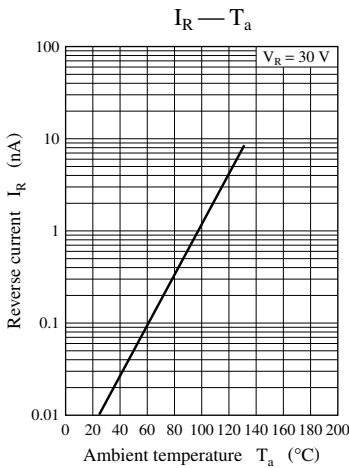
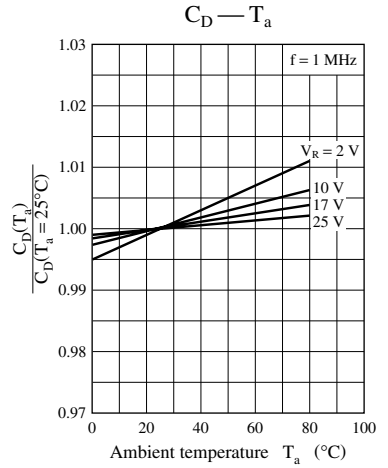
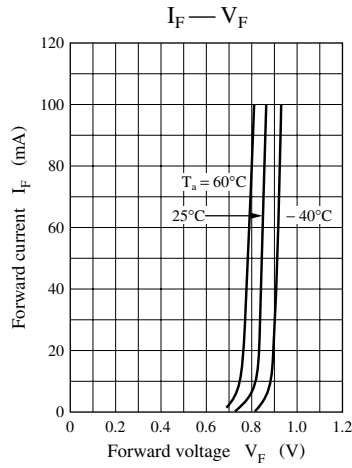
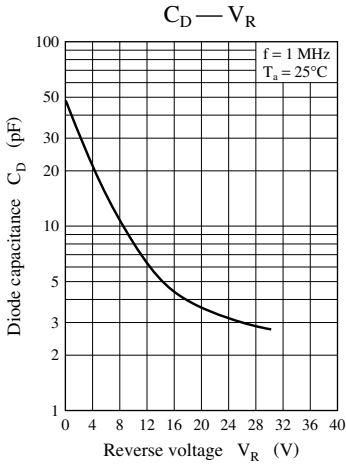
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 30 \text{ V}$			10	nA
Diode capacitance	$C_{D(2V)}$	$V_R = 2 \text{ V}, f = 1 \text{ MHz}$	27.13		32.15	pF
	$C_{D(25V)}$	$V_R = 25 \text{ V}, f = 1 \text{ MHz}$	2.60		3.15	pF
	$C_{D(10V)}$	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$	7.05		9.97	pF
	$C_{D(17V)}$	$V_R = 17 \text{ V}, f = 1 \text{ MHz}$	3.48		4.74	pF
Capacitance ratio	$C_{D(2V)}/C_{D(25V)}$		10			—
Diode capacitance deviation	ΔC	$C_{D(2V)}/(10V)/(17V)/(25V)$			2.5	%
Series resistance*	r_D	$C_D = 9 \text{ pF}, f = 470 \text{ MHz}$			0.63	Ω

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

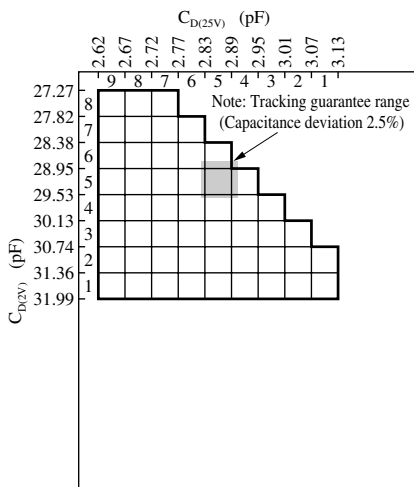
2. * : r_f measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER



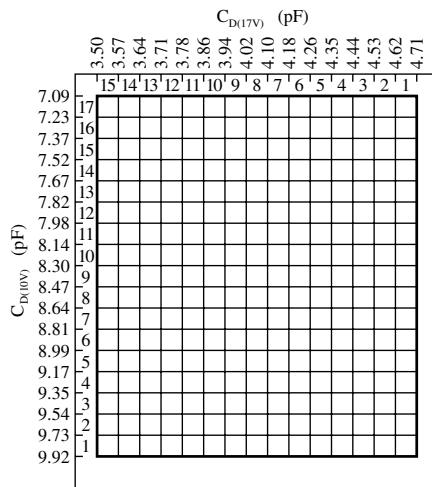


C_D rank classification

Primary rank classification



Secondary rank classification



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