

# MA2X339 (MA339)

## Silicon epitaxial planar type

For UHF and VHF electronic tuners

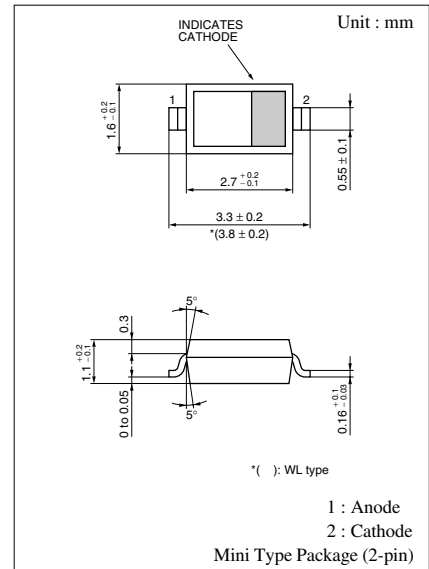
### ■ Features

- Large capacitance ratio
- Small series resistance  $r_D$

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	32	V
Peak reverse voltage*	$V_{RM}$	34	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) \* :  $R_L = 2.2 \text{ k}\Omega$



Marking Symbol: 6N

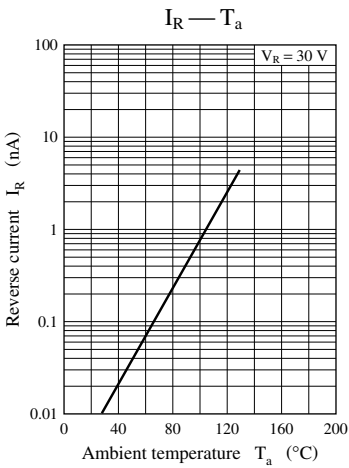
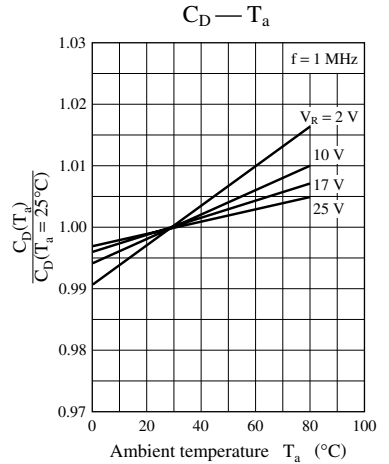
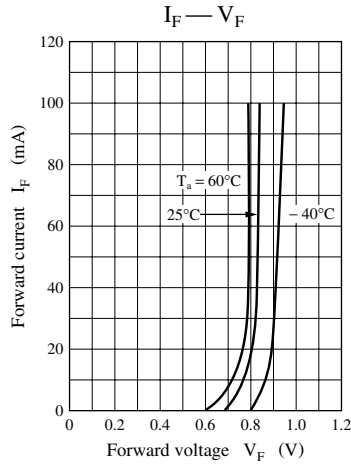
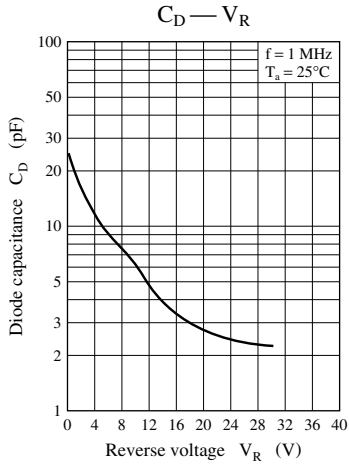
### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30 \text{ V}$			10	nA
Diode capacitance	$C_{D(2V)}$	$V_R = 2 \text{ V}, f = 1 \text{ MHz}$	14.220		15.473	pF
	$C_{D(25V)}$	$V_R = 25 \text{ V}, f = 1 \text{ MHz}$	2.132		2.321	pF
	$C_{D(10V)}$	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$	5.307		6.128	pF
	$C_{D(17V)}$	$V_R = 17 \text{ V}, f = 1 \text{ MHz}$	2.909		3.411	pF
Capacitance ratio	$C_{D(2V)}/C_{D(25V)}$		6.22			—
Capacitance difference	$C_{D(10V)}/C_{D(17V)}$		1.70		1.96	—
Diode capacitance deviation	$\Delta C$	$C_{D(2V)(10V)(17V)(25V)}$			2	%
Series resistance*	$r_D$	$C_D = 9 \text{ pF}, f = 470 \text{ MHz}$			0.45	$\Omega$

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

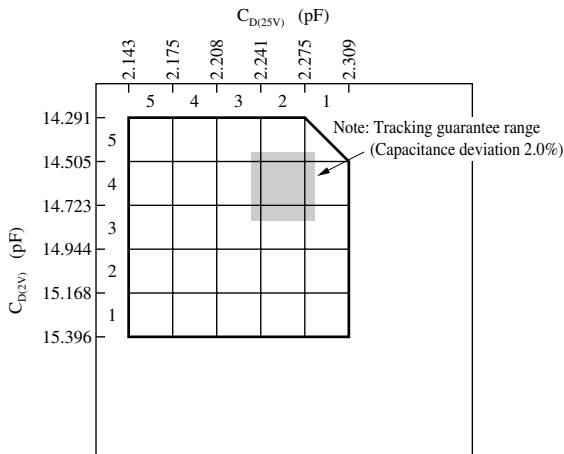
2. \* :  $r_f$  measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER

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

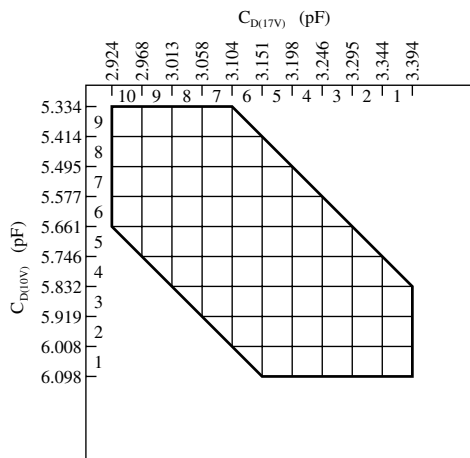


**$C_D$  rank classification**

**Primary rank classification**



**Secondary rank classification**



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