# **MA2X339** (MA339)

# Silicon epitaxial planar type

For UHF and VHF electronic tuners

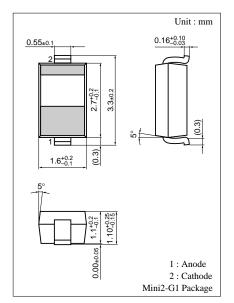
#### ■ Features

- Large capacitance ratio
- Small series resistance r<sub>D</sub>

## ■ Absolute Maximum Ratings $T_a = 25$ °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 <sub>j</sub>	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

Note) \*:  $R_L = 2.2 \text{ k}\Omega$ 



Marking Symbol: 6N

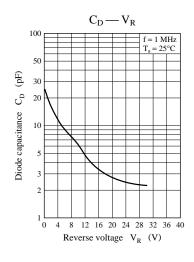
## ■ Electrical Characteristics $T_a = 25$ °C

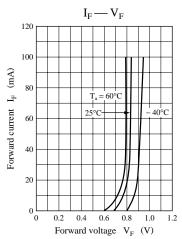
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30 \text{ V}$			10	nA
Diode capacitance	C <sub>D(2V)</sub>	$V_R = 2 V, f = 1 MHz$	14.220		15.473	pF
	C <sub>D(25V)</sub>	$V_R = 25 \text{ V}, f = 1 \text{ MHz}$	2.132		2.321	pF
	C <sub>D(10V)</sub>	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$	5.307		6.128	pF
	C <sub>D(17V)</sub>	$V_R = 17 \text{ V, } f = 1 \text{ MHz}$	2.909		3.411	pF
Capacitance ratio	C <sub>D(2V)</sub> /C <sub>D(25V)</sub>		6.22			_
Capacitance difference	C <sub>D(10V)</sub> /C <sub>D(17V)</sub>		1.70		1.96	_
Diode capacitance deviation	ΔC	C <sub>D(2V)(10V)(17V)(25V)</sub>			2	%
Series resistance*	$r_{\mathrm{D}}$	$C_D = 9 \text{ pF, } f = 470 \text{ MHz}$			0.45	Ω

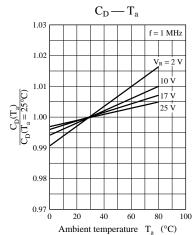
Note) 1. Rated input/output frequency: 470 MHz

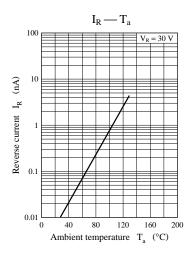
Note) The part number in the parenthesis shows conventional part number.

<sup>2. \*:</sup> r<sub>f</sub> measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER







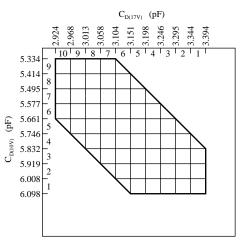


#### C<sub>D</sub> rank classification

# C<sub>D(25V)</sub> (pF) 14.291 14.505 14.723 14.944 15.396 15.396

Primary rank classification

### Secondary rank classification



Panasonic 303

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