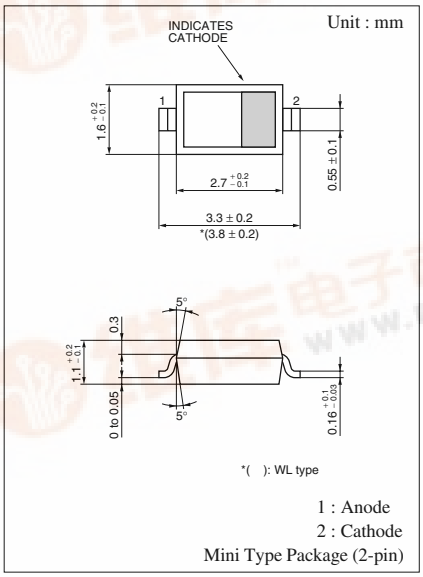
MA2X339 (MA339)

Silicon epitaxial planar type

For UHF and VHF electronic tuners



Marking Symbol: 6N

■ Features

- Large capacitance ratio
- Small series resistance r_D

■ 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_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

Note) * : R_L = 2.2 kΩ

■ Electrical Characteristics $T_a = 25°C$

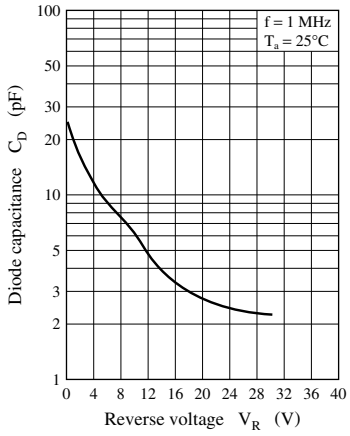
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 30 V			10	nA
Diode capacitance	$C_{D(2V)}$	V_R = 2 V, f = 1 MHz	14.220		15.473	pF
	$C_{D(25V)}$	V_R = 25 V, f = 1 MHz	2.132		2.321	pF
	$C_{D(10V)}$	V_R = 10 V, f = 1 MHz	5.307		6.128	pF
	$C_{D(17V)}$	V_R = 17 V, f = 1 MHz	2.909		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	ΔC	$C_{D(2V)(10V)(17V)(25V)}$			2	%
Series resistance*	r_D	C_D = 9 pF, f = 470 MHz			0.45	Ω

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

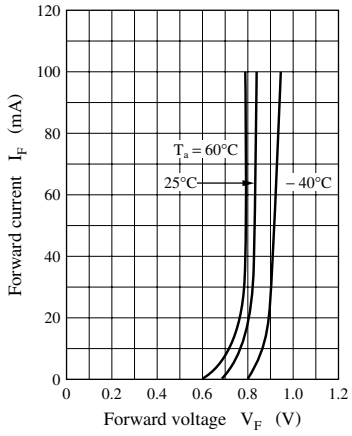
2. * : r_f measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER

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

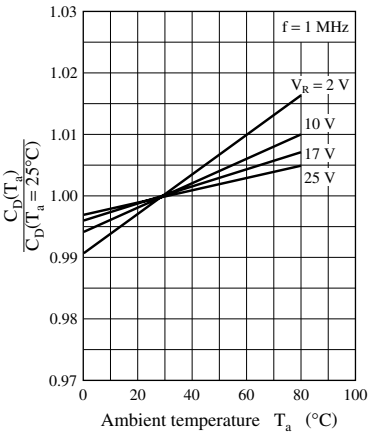
C_D — V_R



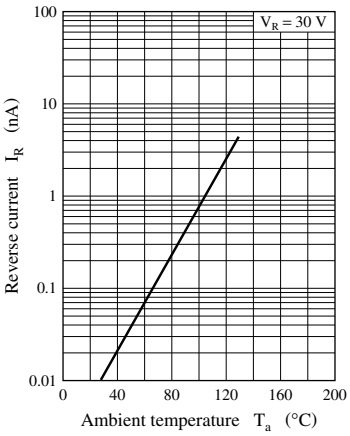
I_F — V_F



C_D — T_a

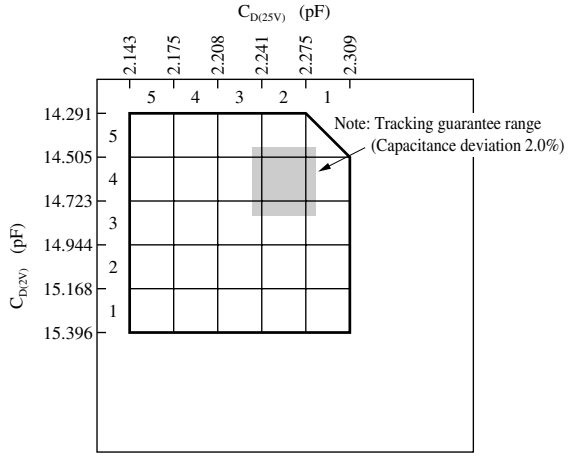


I_R — T_a

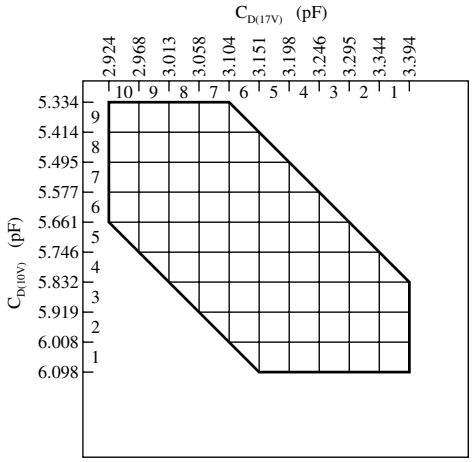


C_D rank classification

Primary rank classification



Secondary rank classification



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