# MA2X333 (MA333)

### N type GaAs epitaxial planar type

#### For VCO of a radio

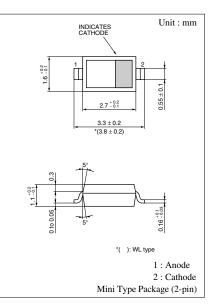
For electronic tuning of UHF and VHF TV tuner

#### Features

- $\bullet$  Small series resistance  $r_D$  and high Q value
- Large capacitance ratio during low-voltage operation

<b>3</b> a						
Parameter	Symbol	Rating	Unit			
Reverse voltage (DC)	V <sub>R</sub>	9	V			
Forward current (DC)	$I_{\rm F}$	100	mA			
Junction temperature	Tj	125	°C			
Storage temperature	T <sub>stg</sub>	-55 to +125	°C			

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



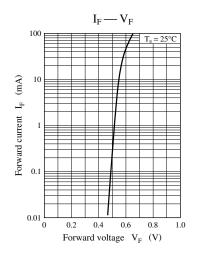
Marking Symbol: 6C

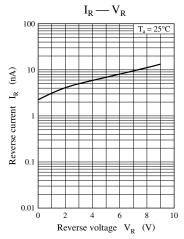
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I <sub>R</sub>	$V_R = 6 V$			100	nA
Reverse voltage (DC)	V <sub>R</sub>	$I_R = 1 \ \mu A$	9			v
Diode capacitance	C <sub>D(2V)</sub>	$V_R = 2 V, f = 1 MHz$	13.5	15.5	17.0	pF
	C <sub>D(4V)</sub>	$V_R = 4 V, f = 1 MHz$	4.0	6.8	7.5	pF
	C <sub>D(6V)</sub>	$V_R = 6 V, f = 1 MHz$	2.8	4.0	4.5	pF
Series resistance*	r <sub>D</sub>	$C_{\rm D} = 9 \text{ pF}, \text{ f} = 470 \text{ MHz}$		0.25	0.35	Ω

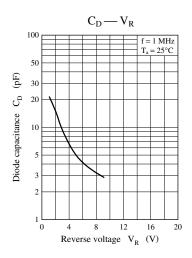
#### ■ Electrical Characteristics T<sub>a</sub> = 25°C

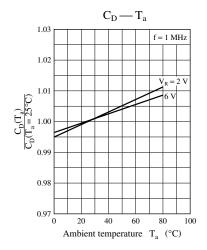
Note) 1. Rated input/output frequency: 470 MHz

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









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