MA2S331

Silicon epitaxial planar type

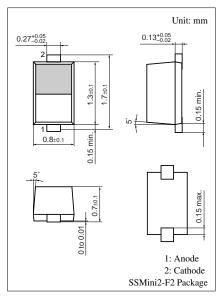
For VCO of an UHF radio

■ Features

- Small series resistance: $r_D = 0.18 \Omega$ (typ.)
- Good linearity of C V curve
- SS-Mini type package, optimum for downsizing of equipment

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	12	V
Forward current (DC)	I_F	20	mA
Junction temperature	T _j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C



Marking Symbol: F

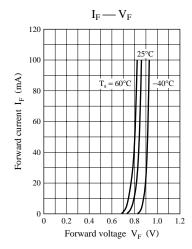
■ Electrical Characteristics $T_a = 25$ °C

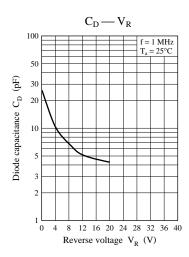
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I_R	$V_R = 12 \text{ V}$			10	nA
Diode capacitance	C _{D(1V)}	$V_R = 1 \text{ V, } f = 1 \text{ MHz}$	17.0		20.0	pF
	C _{D(2V)}	$V_R = 2 V, f = 1 MHz$	14.0	15.0	16.0	
	C _{D(4V)}	$V_R = 4 \text{ V}, \text{ f} = 1 \text{ MHz}$	10.0		12.4	
	C _{D(10V)}	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$	5.5	6.0	6.5	
Capacitance ratio	C _{D(1V)} /C _{D(4V)}		1.53	1.6	1.83	_
	C _{D(2V)} /C _{D(10V)}		2.25	2.5	2.75	
Series resistance *	r_{D}	$C_D = 9 \text{ pF, f} = 470 \text{ MHz}$		0.18	0.22	Ω

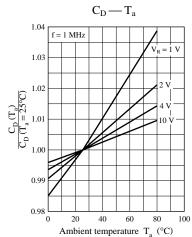
Note) 1. Rated input/output frequency: 470 MHz

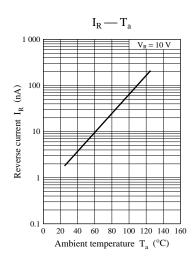
Publication date: April 2002 SKD00006BED 1

^{2. *:} Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER









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