



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MA2S331

Silicon epitaxial planar type

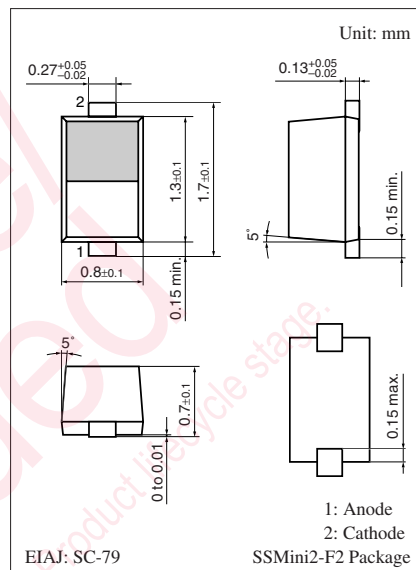
For UHF wireless telegraphic VCO

■ Features

- Small series resistance r_D
- Good linearity of C – V curve
- SS-Mini type package, optimum for downsizing of equipment

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

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	12	V
Forward current	I_F	20	mA
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



Marking Symbol: F

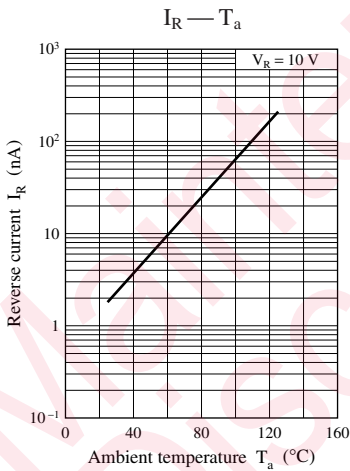
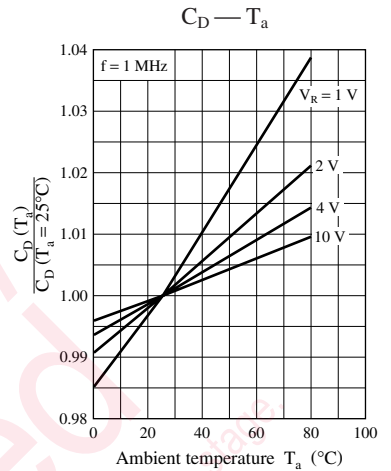
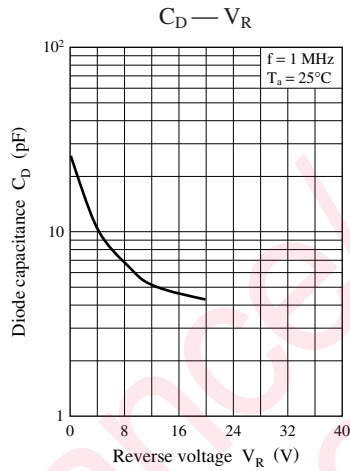
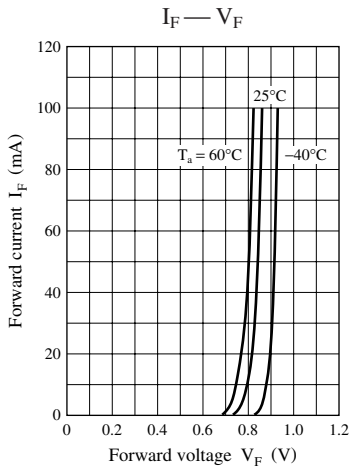
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	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
	$C_{D(2V)}$	$V_R = 2\text{ V}, f = 1\text{ MHz}$	14.0	15.0	16.0	
	$C_{D(4V)}$	$V_R = 4\text{ V}, f = 1\text{ MHz}$	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	1.60	1.83	—
	$C_{D(2V)}/C_{D(10V)}$		2.25	2.50	2.75	
Series resistance *	r_D	$C_D = 9\text{ pF}, f = 470\text{ MHz}$		0.18	0.22	Ω

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 470 MHz.

3. *: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER



Maintenance/Discontinued includes following four Product lifecycle type
 planned maintenance type
 maintenance type
 planned discontinued type
 discontinued type
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