

SVC201SPA, 201Y

Duffused Junctions Type Sillicon Diode Varactor Diode (IOCAP) for FM Receiver Electronic Tuning

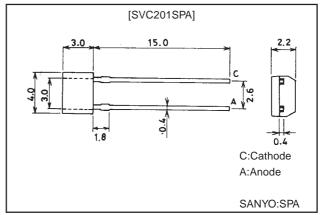
### **Features**

- · The SVC201SPA, 201Y are varactor diodes of hyper abrupt junction structure fabricated with ion implantation technology. It is intended for use in FM receiver electronic tuning applications.
  - · Capable of being operated from a low voltage (Voltage range:1 to 9V)
  - · High Q
  - · High Capacitance raito
  - · Uniform capacistance-voltage characteristic provided diode to be used in combination.

### **Package Dimensions**

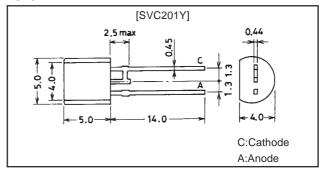
unit:mm

1184



unit:mm

1010A



### **Specifications**

#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Voltage	٧ <sub>R</sub>		-16	V
Junction Temperature	Tj		100	°C
Storage Temperature	Tstg		-55 to +100	°C

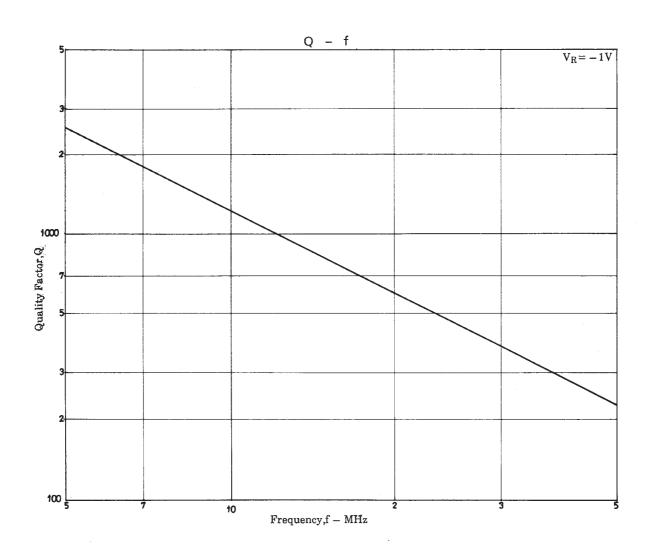
#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings			
Falameter	Symbol	Conditions	min typ		max	Unit	
Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =-10μA	-16			V	
Reverse Current	IR	V <sub>R</sub> =-9V			-50	nA	
Interterminal Capacitance	C <sub>1.6V</sub>	V <sub>R</sub> =-1.6V, f=1MHz	28.19		37.45	pF	
	C <sub>3.5V</sub>	V <sub>R</sub> =-3.5V, f=1MHz	19.04		24.33	pF	
	C <sub>5.0V</sub>	V <sub>R</sub> =-5.0V, f=1MHz	14.48		18.49	pF	
	C <sub>7.5V</sub>	V <sub>R</sub> =-7.5V, f=1MHz	10.17		12.99	pF	
Capacitance Raito	CR	C <sub>1.6V</sub> /C <sub>7.5V</sub>	2.2		3.7		
Series Resistance	r <sub>S</sub>	f=50MHz ,V <sub>R</sub> =-1V			0.6	Ω	
Matching Tolerance	ΔC <sub>m</sub>	(C <sub>max</sub> -C <sub>min</sub> )/C <sub>min</sub>			0.05		

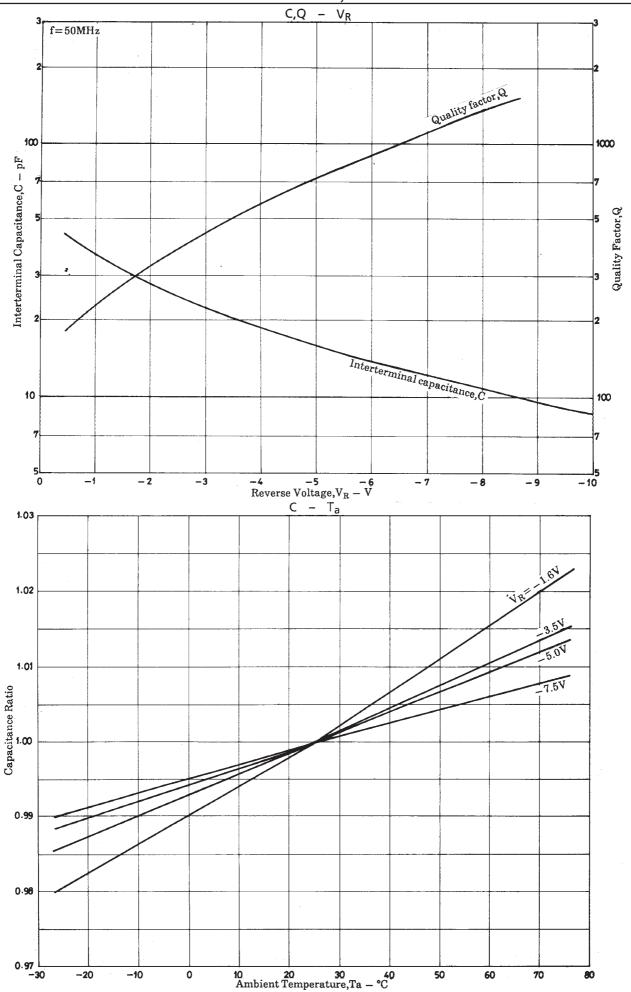
# **SVC201SPA, 201Y**

# ♦ Address and Capacitance Value

TEST POINT	C 1.6V		C 3.5V		C 5.0V			C 7.5V			
	Address	Capaci- tance (pF)	Address		Capaci – tance (pF)	Address	•	Capaci – tance (pF)	Address		Capaci – tance (pF)
	38 [	37.45 35.67	27	]	24.33 23.17	20	£	18.49 17.61	11	[	12.99 12.37
UE	37 [	36.01 34.30	26	]	23.39 22.28	19	]	17.78 16.93	10	[	12.50 11.90
E VAI	36 [	34.63 32.98	25	]	22.49 21.42	18	[	17.09 16.28	9	[	12.01 11.44
ČAPACITANCE VALUE	35 [	33.30 31.71	24	[	21.63 20.60	17	{	16.43 15.65	8	[	11.54 10.99
CAPAC	34 [	32.02 30.50	23	]	20.80 19.81	16	ſ	15.81 15.05	7	{	11.11 10.58
	33 [	30.79 29.32	22	Į.	20.00 19.04	15	[	15.20 14.48	6	1	10.68 10.17
	32 [	29.60 28.19	!								



# SVC201SPA, 201Y



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