



# SVC202SPA

## Varactor Diode (IOCAP) for FM Receiver Electronic Tuning

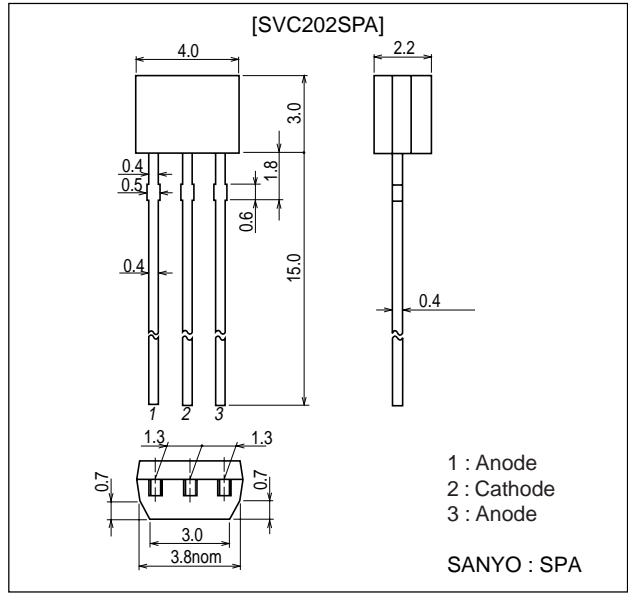
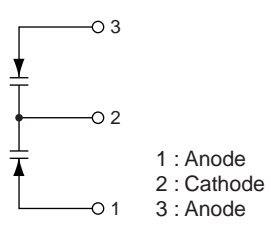
### Features

- Twin type FM electronic tuning-use varactor diode which excels in large input characteristics.

### Package Dimensions

unit : mm  
1129A

### Electical Connection



### Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V <sub>R</sub>		16	V
Junction Temperature	T <sub>j</sub>		100	°C
Storage Temperature	T <sub>stg</sub>		-55 to +100	°C

### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	V(BR) <sub>R</sub>	I <sub>R</sub> =10μA	16			V
Reverse Current	I <sub>R</sub>	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 Ratio	CR	C <sub>1.6V</sub> / C <sub>7.5V</sub> , f=1MHz	2.2			
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	

Note)\* : Capacitance value of one diode

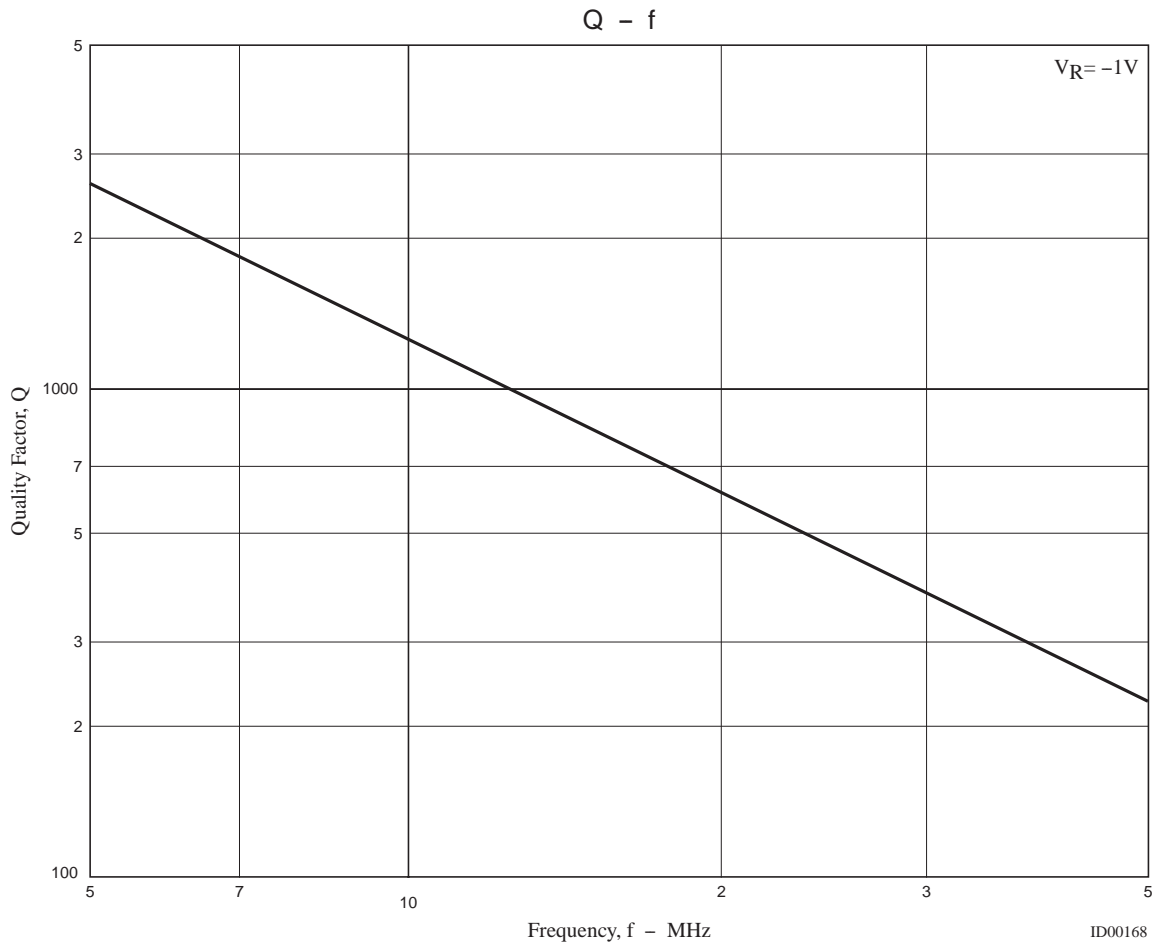
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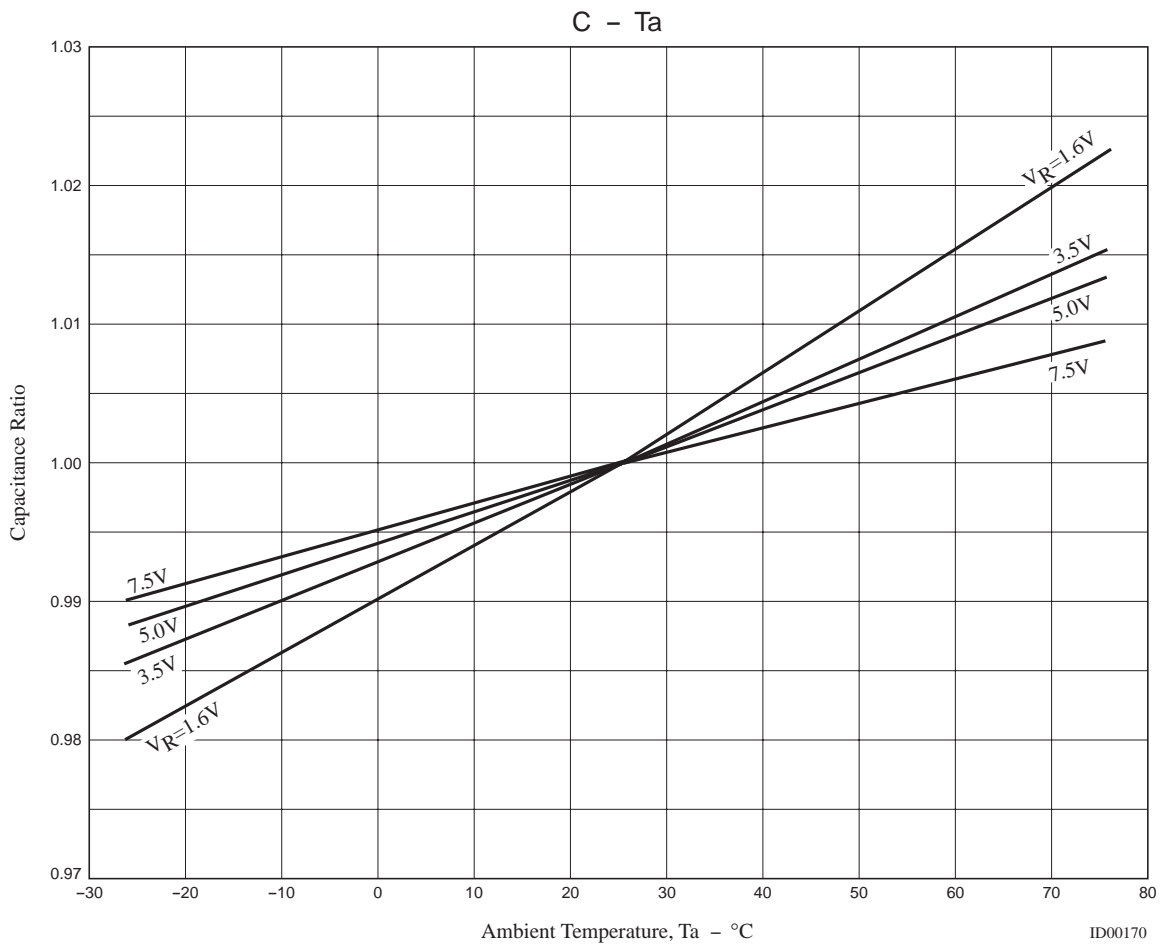
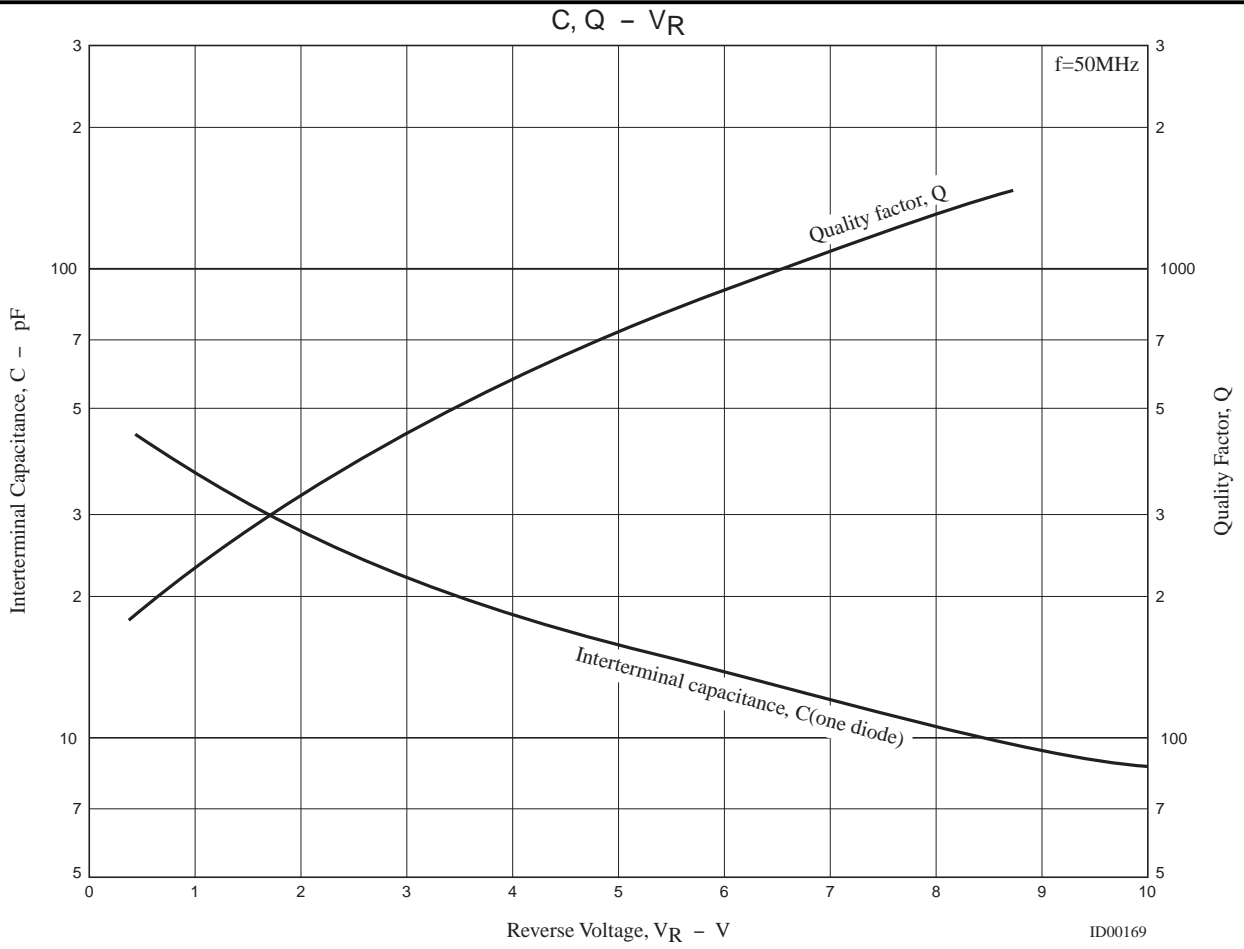
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## Address and Capacitance Value (one diode)

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



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