

**SVC202SPA**

Varactor Diode (IOCAP) for FM Receiver Electronic Tuning

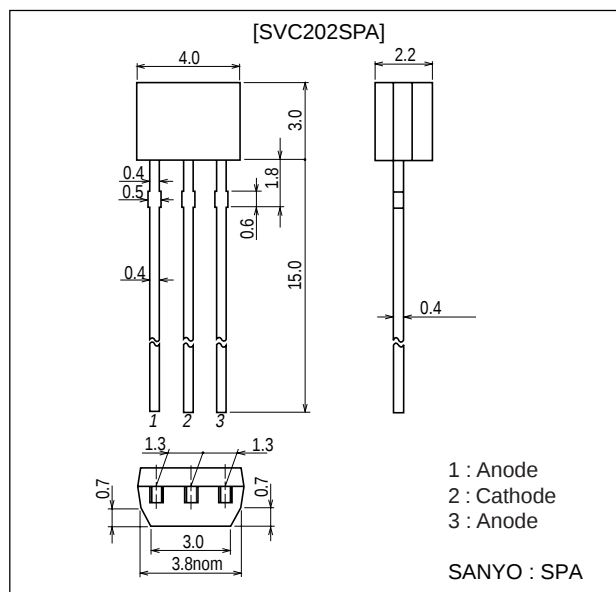
Features

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

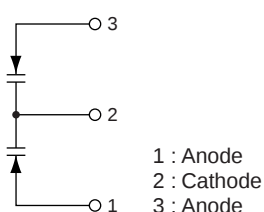
Package Dimensions

unit : mm

1129A



Electical Connection



Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		16	V
Junction Temperature	T_j		100	°C
Storage Temperature	T_{stg}		-55 to +100	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	16			V
Reverse Current	I_R	$V_R=9V$			50	nA
Interterminal Capacitance*	C1.6V	$V_R=1.6V, f=1MHz$	28.19		37.45	pF
	C3.5V	$V_R=3.5V, f=1MHz$	19.04		24.33	pF
	C5.0V	$V_R=5.0V, f=1MHz$	14.48		18.49	pF
	C7.5V	$V_R=7.5V, f=1MHz$	10.17		12.99	pF
Capacitance Ratio	CR	$C_{1.6V} / C_{7.5V}, f=1MHz$	2.2		3.7	
Series Resistance	r_s	$f=50MHz, V_R=1V$			0.6	Ω
Matching Tolerance	ΔC_m	$(C_{max} - C_{min}) / C_{min}$			0.05	

Note)* : Capacitance value of one diode

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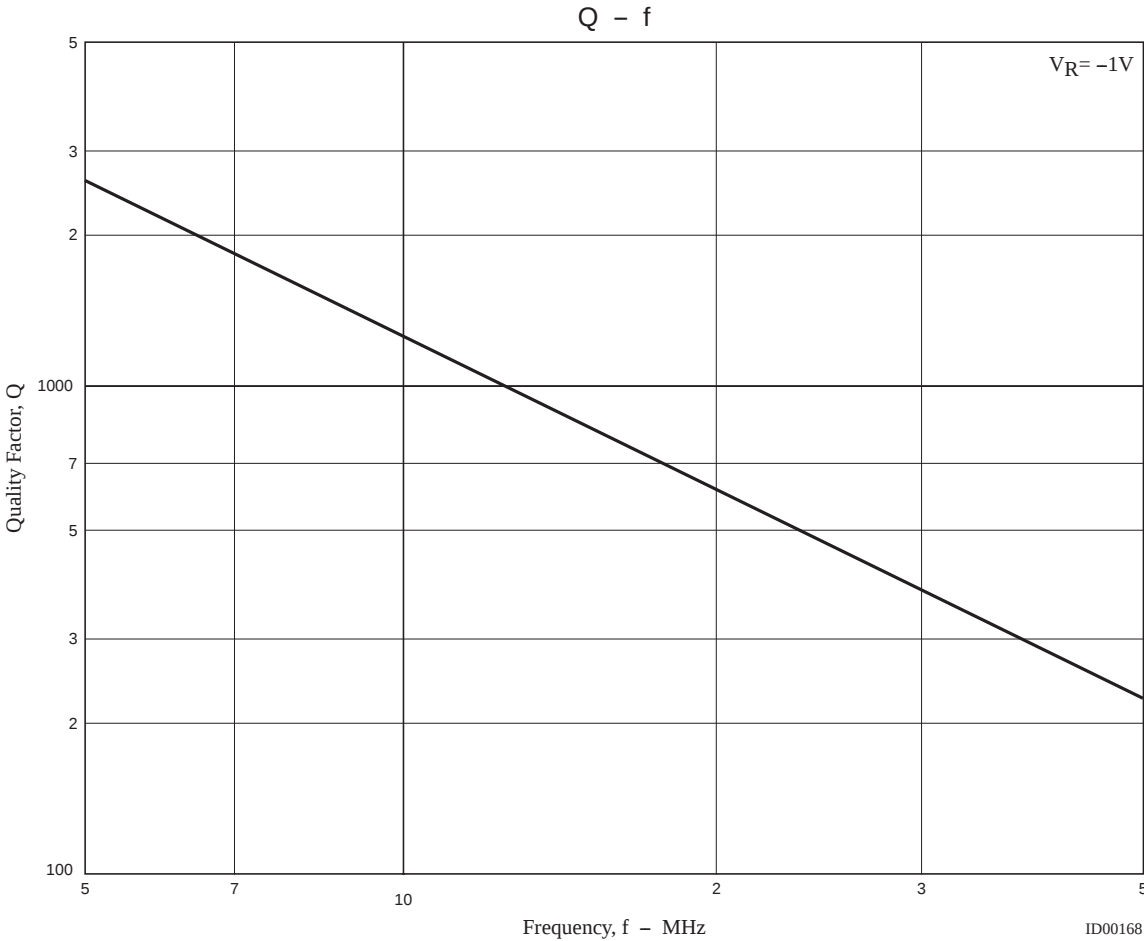
SANYO Electric Co.,Ltd. Semiconductor Company

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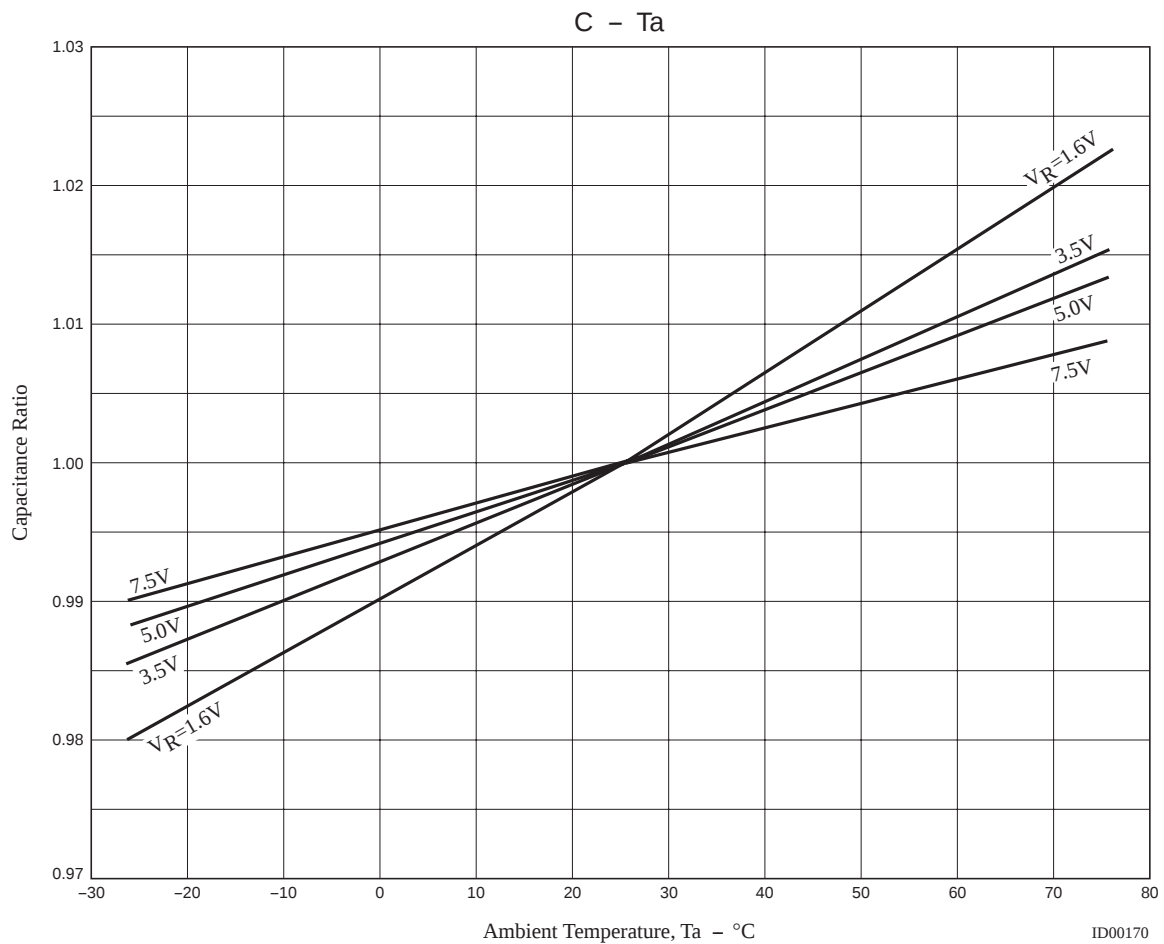
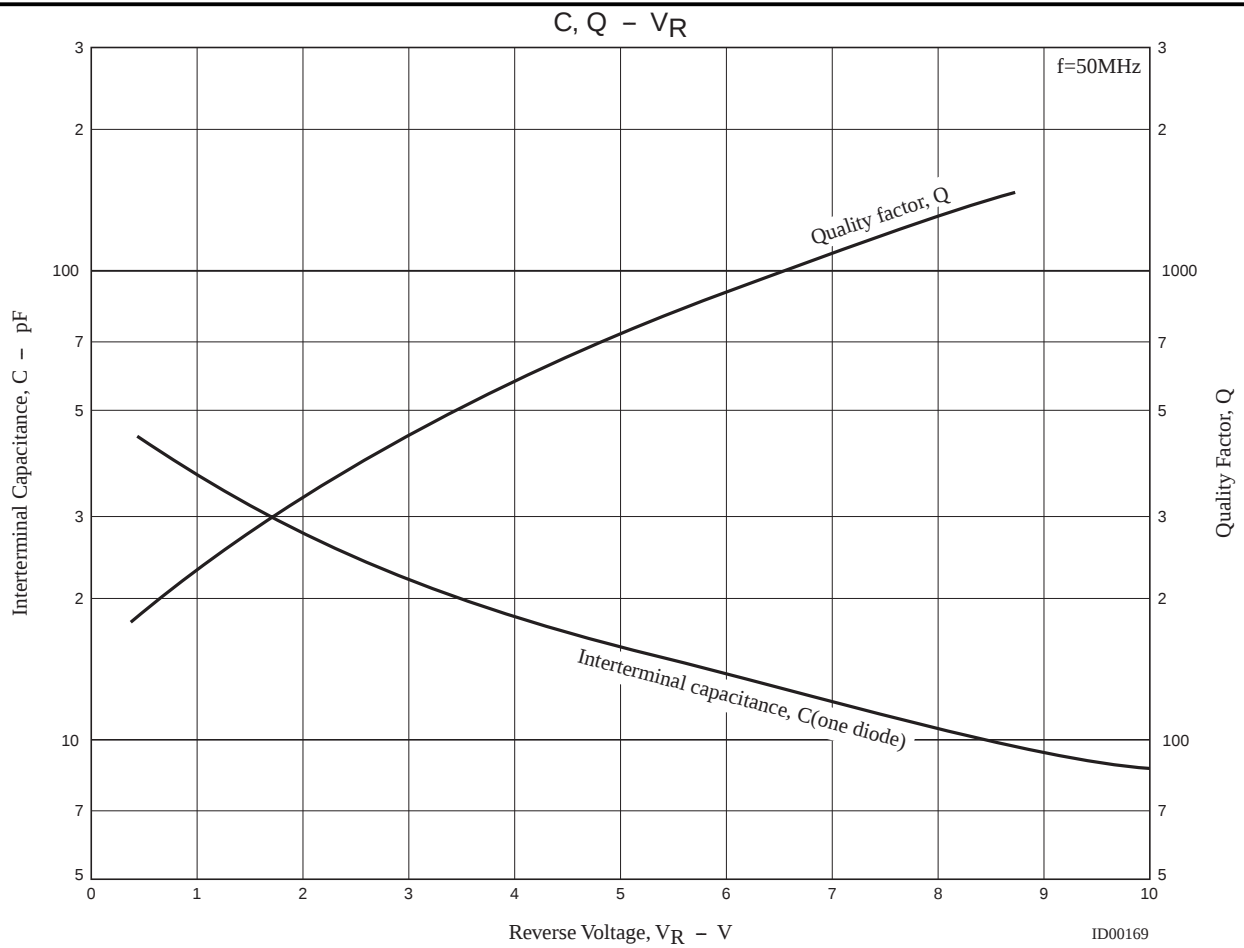
61501 GI IM / 33098HA(KT) / 2279TA, TS No.698-1/4

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						



SVC202SPA



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