



# SVC202, 202SPA

Diffused Junction Type Silicon Diode  
Varactor Diode (IOCAP)

for FM Receiver Electronic Tuning

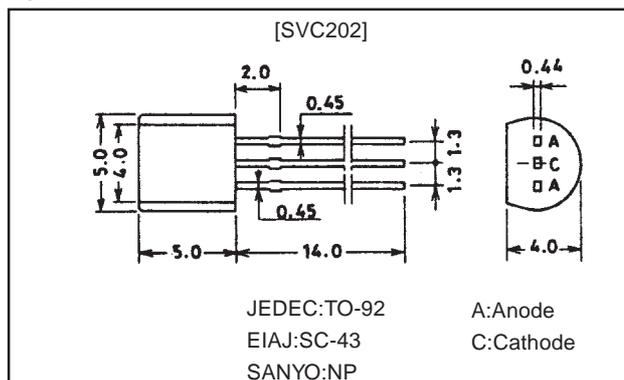
## Features

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

## Package Dimensions

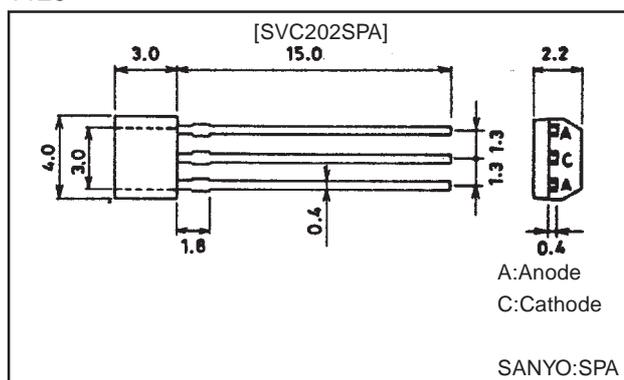
unit:mm

1074A

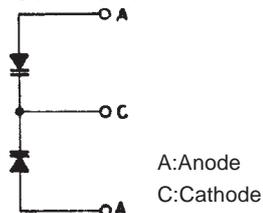


unit:mm

1129



## Electical Connection



## Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive 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*	$C_{1.6V}$	$V_R = -1.6V, f = 1MHz$	28.19		37.45	pF
	$C_{3.5V}$	$V_R = -3.5V, f = 1MHz$	19.04		24.33	pF
	$C_{5.0V}$	$V_R = -5.0V, f = 1MHz$	14.48		18.49	pF
	$C_{7.5V}$	$V_R = -7.5V, f = 1MHz$	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	$\Omega$
Matching Tolerance	$\Delta C_m$	$(C_{max} - C_{min})/C_{min}$			0.05	

Note)\*:Capacitance value of one diode

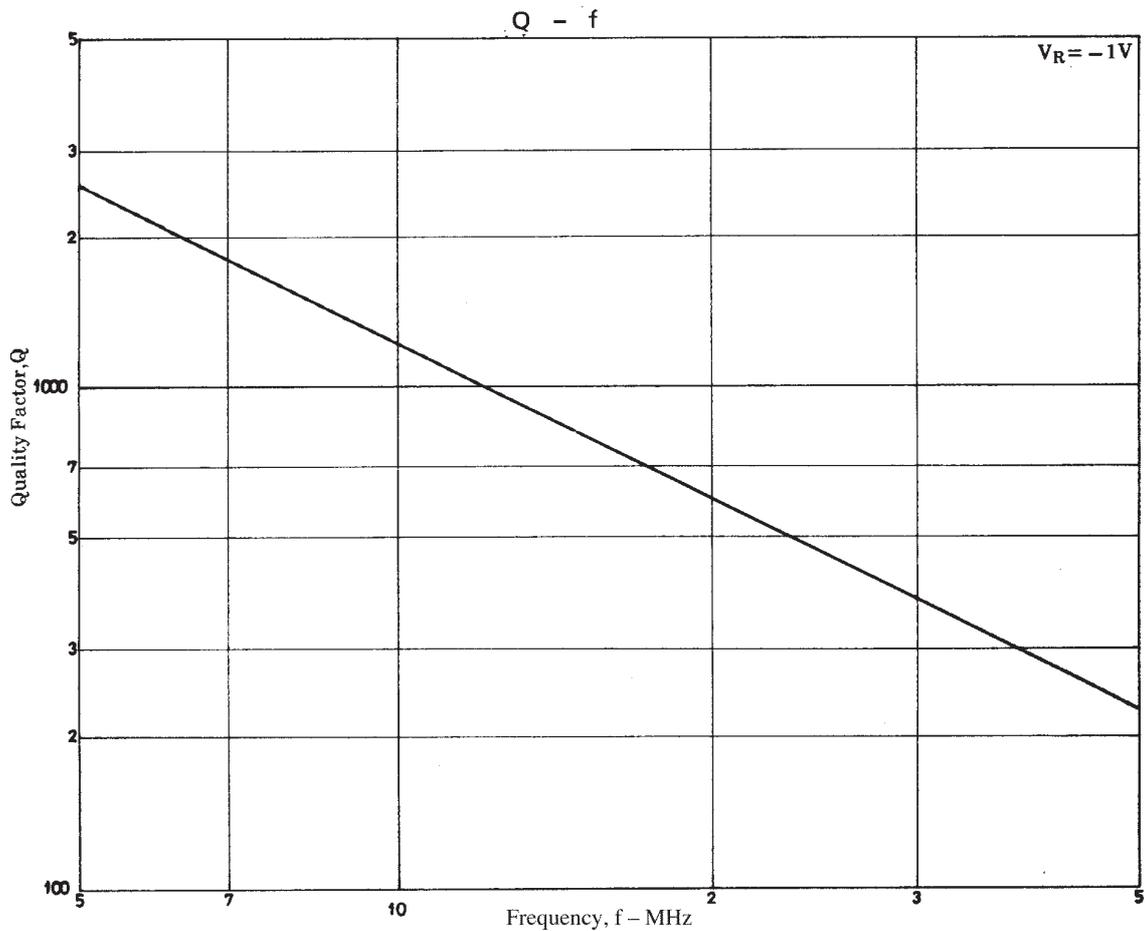
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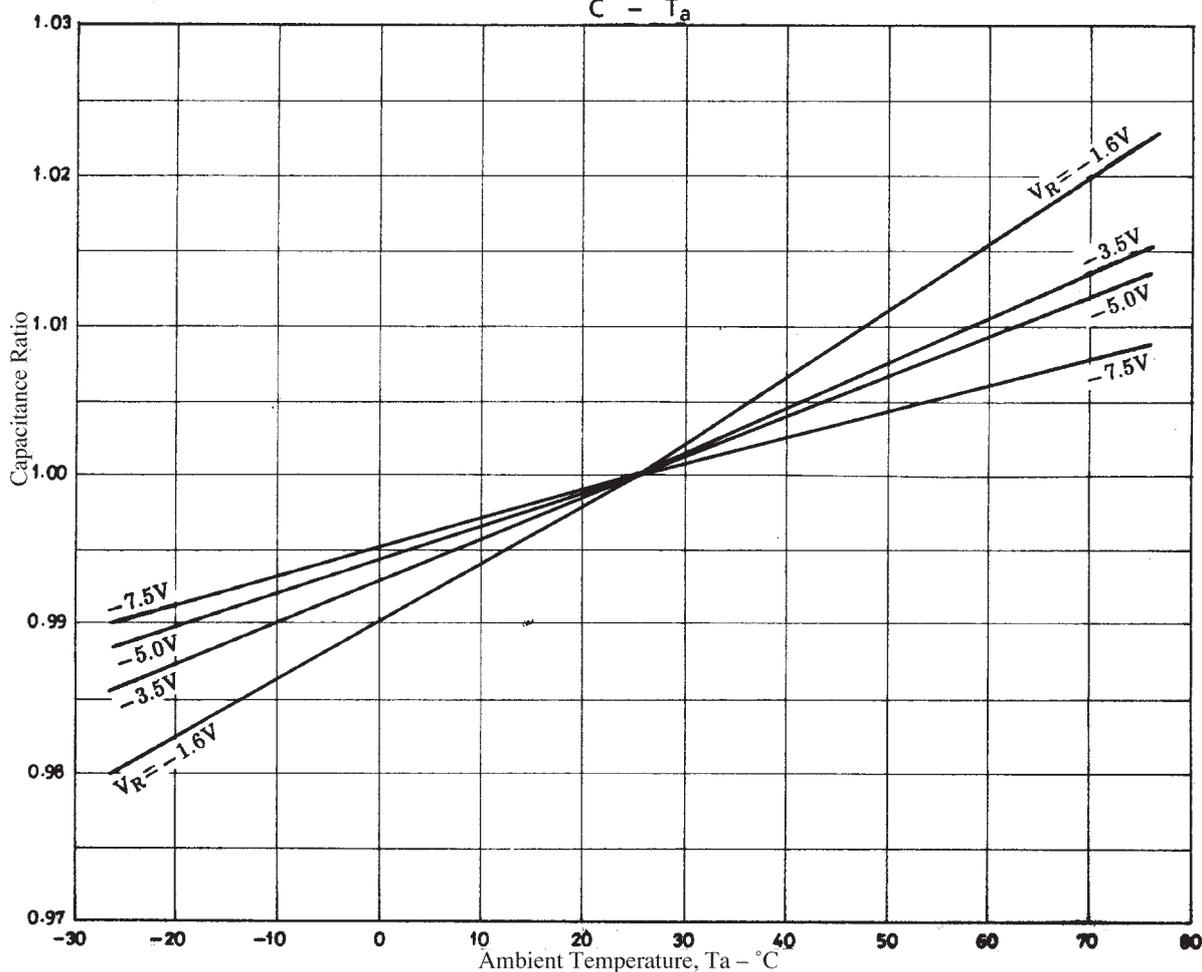
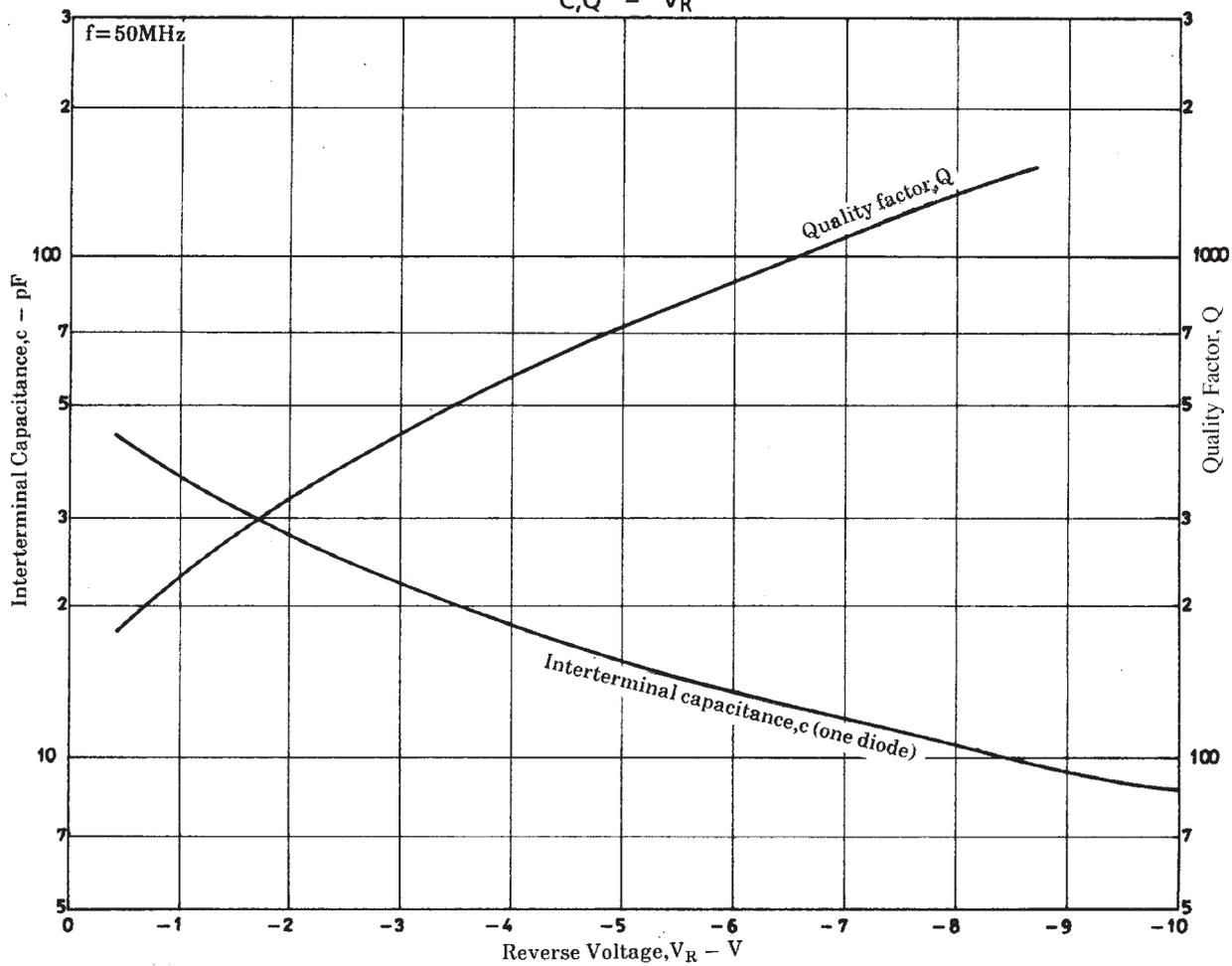
## Address and Capacitance Value (one diode)

TEST POINT	C 1.6V	C 3.5V	C 5.0V	C 7.5V
CAPACITANCE VALUE	Address Capacitance (pF)	Address Capacitance (pF)	Address Capacitance (pF)	Address Capacitance (pF)
	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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C, Q -  $V_R$



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