



SVC202, 202SPA

Diffused Junction Type Silicon Diode
Varactor Diode (IOCAP)

for FM Receiver Electronic Tuning

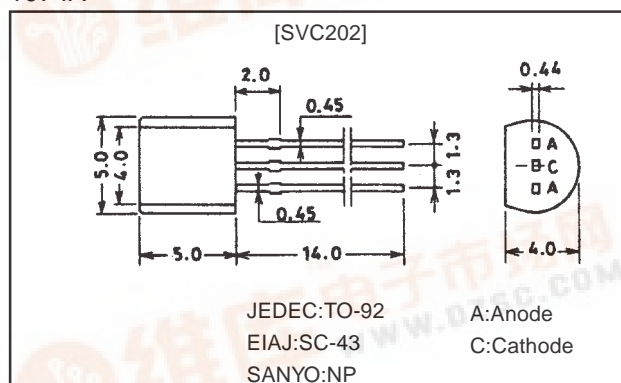
Features

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

Package Dimensions

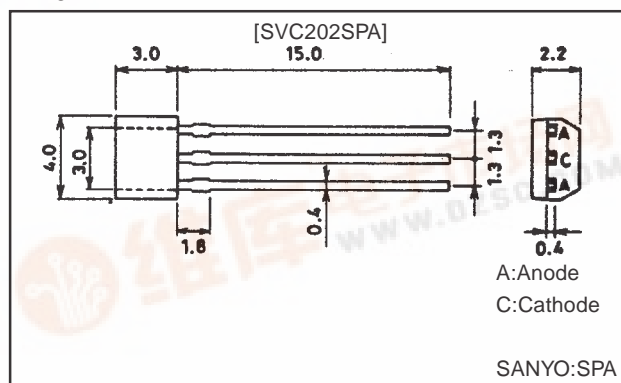
unit:mm

1074A

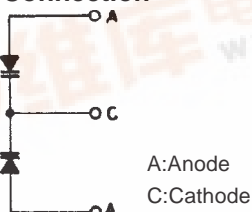


unit:mm

1129



Electrical 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

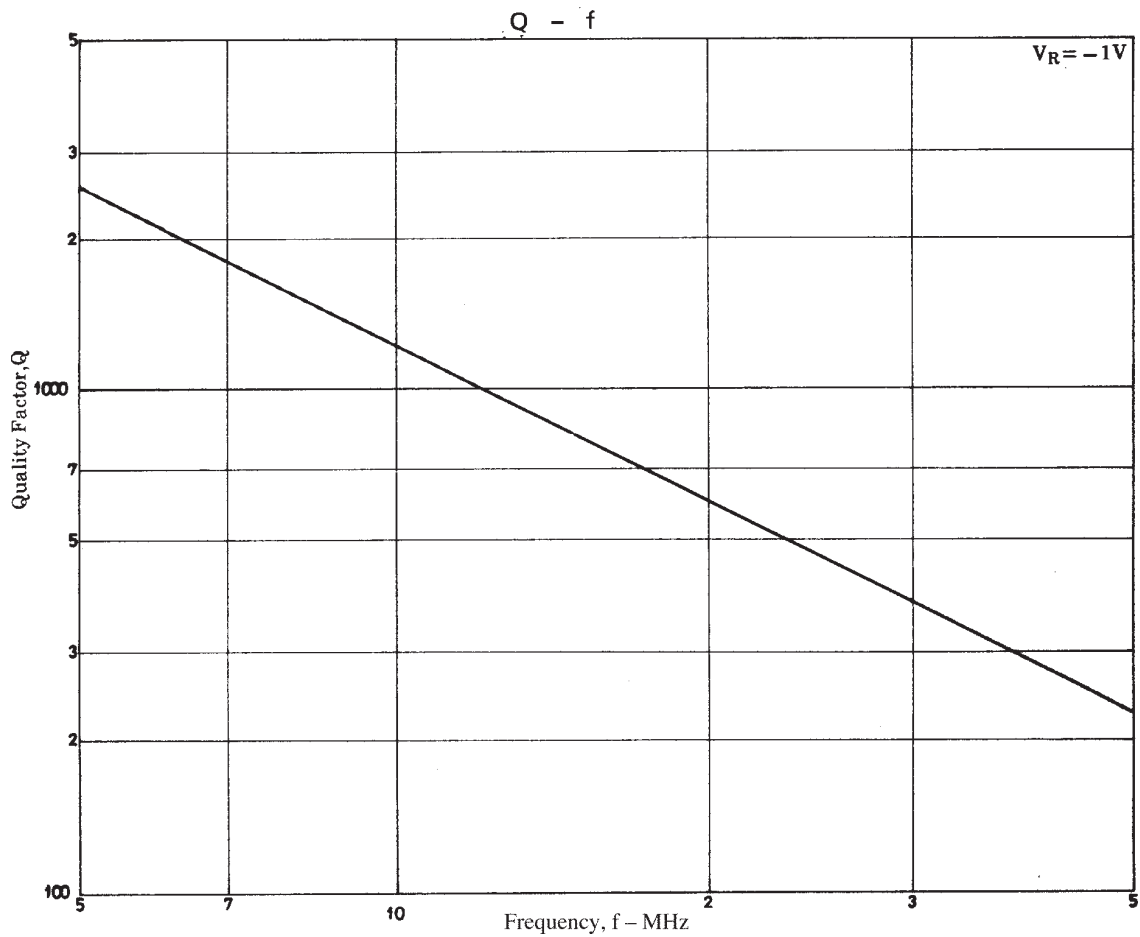
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R = -10\mu A$	-16			V
Reverse Current	I_R	$V_R = -9V$			-50	nA
Interterminal Capacitance*	$C_{1.6V}$	$V_R = -1.6V, f = 1MHz$	28.19		37.45	pF
	$C_{3.5V}$	$V_R = -3.5V, f = 1MHz$	19.04		24.33	pF
	$C_{5.0V}$	$V_R = -5.0V, f = 1MHz$	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	Ω
Matching Tolerance	ΔC_m	$(C_{max} - C_{min})/C_{min}$			0.05	

Note: *Capacitance value of one diode

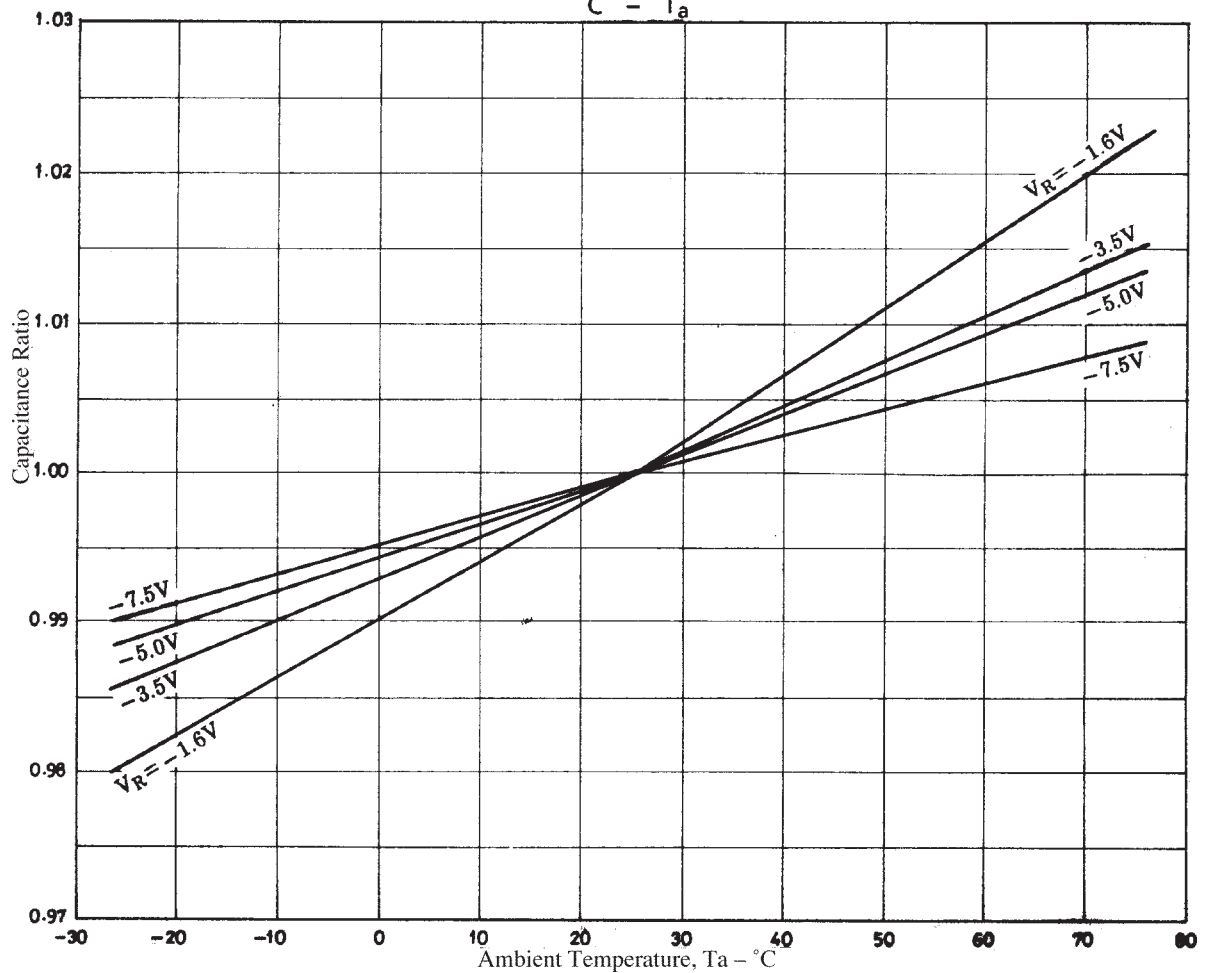
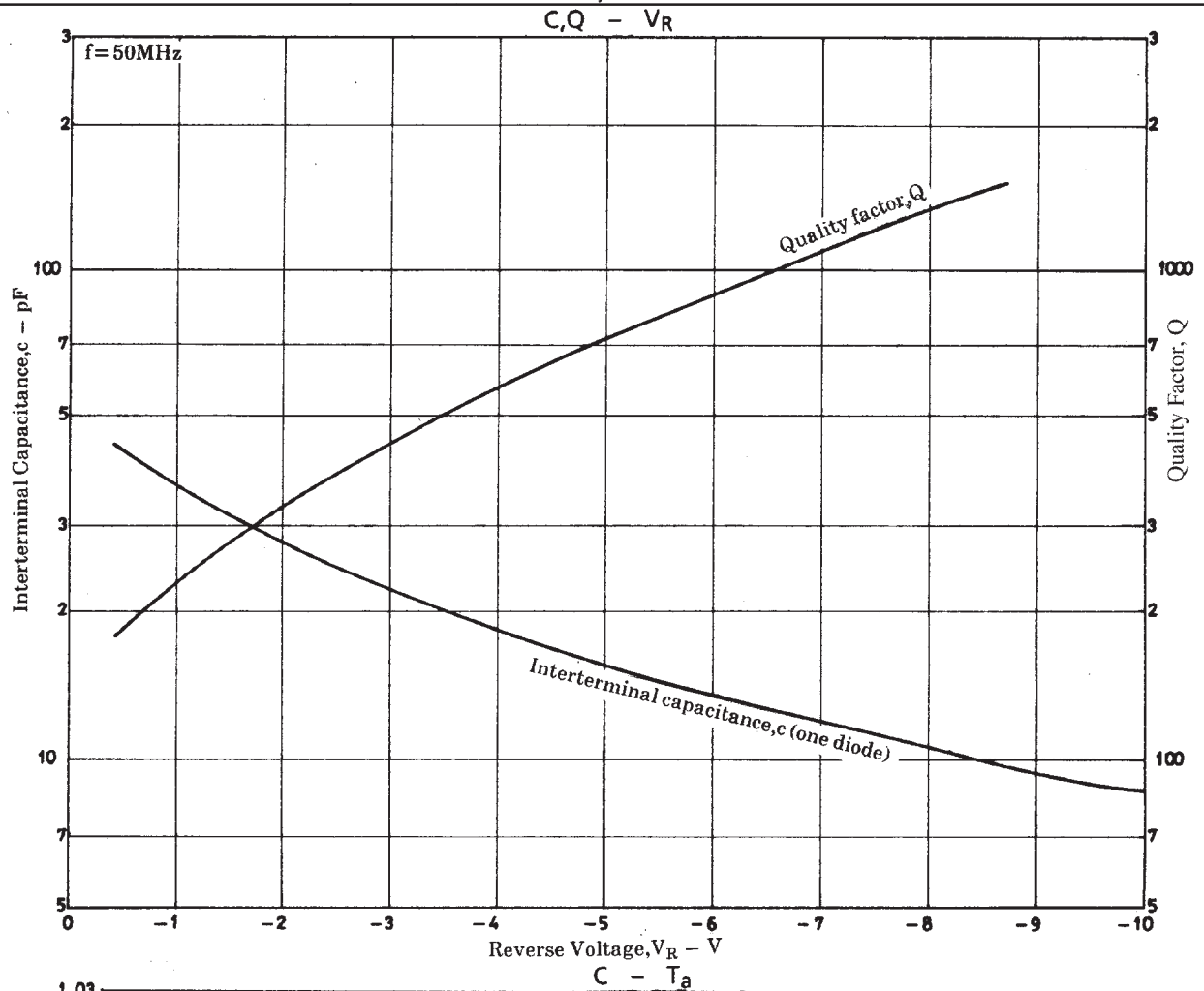
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Address and Capacitance Value (one diode)

TEST POINT	C 1.6V	C 3.5V	C 5.0V	C 7.5V
	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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