

SVC208

Silicon Diffused Junction Type Varactor Diode (IOCAP)

for FM Low-Voltage Electronic Tuning

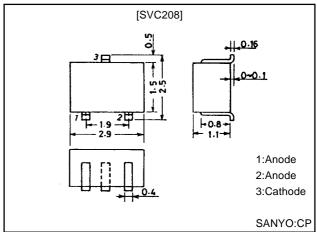
Features

- · Dual type with a good linearity of C-V characteristic. Excels in large input characteristic.
- · Small-sized package (CP) available for very small-sized sets (surface mount type).
- \cdot Appilicable to FM wide band due to high capacitance ratio (V_R =1.5 to 9V).

Package Dimensions

unit:mm

1169A



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	٧ _R		16	V
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

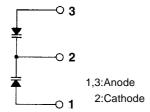
Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Unit		
r arameter	Symbol	Conditions	min	typ	max	Offic
Breakdown Voltage	V(BR)R	I _R =10μA	16			V
Reverse Current	IR	V _R =10V			50	nA
Interterminal Capacitance*	C _{3.0V}	V _R =3.0V, f=1MHz	36.92		43.03	pF
	C _{4.5} V	V _R =4.5V, f=1MHz	27.45		32.80	pF
	C _{6.0V}	V _R =6.0V, f=1MHz	19.91		25.61	pF
	C _{8.0V}	V _R =8.0V, f=1MHz	12.77		16.84	pF
Quality Factor	Q	V _R =3.0V, f=100MHz	60			
Capacitance Ratio	CR	C _{3.0V} /C _{8.0V}	2.50		3.00	
Matching Tolerance	ΔC _m	$(C_{\text{max}}-C_{\text{min}})/C_{\text{min}}, V_{\text{R}}=2.0V \text{ to } 8.0V$			0.03	

Note)*:Capacitance value of one diode

· Marking:AV

Electrical Connection

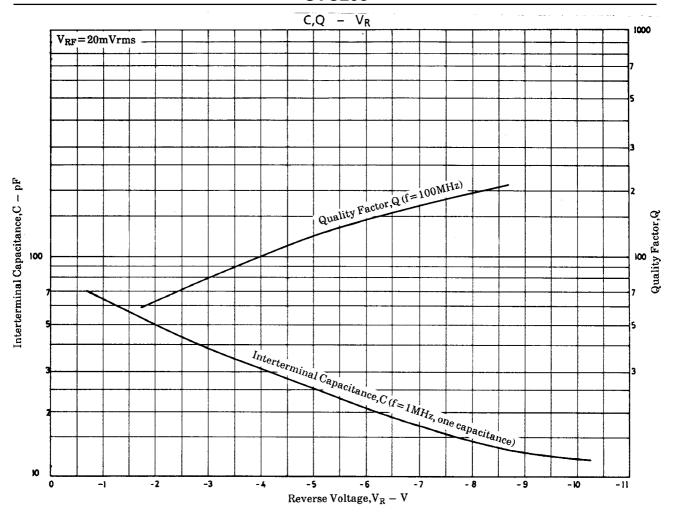


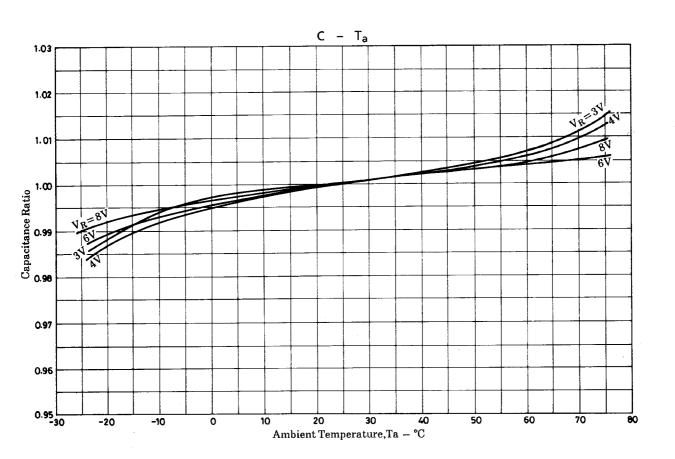
Address and Capacitance Value

$V_R = 3.0V$			$V_R = 4.5V$		$V_R = 6.0V$	$V_R = 8.0V$		
Address	Capacitance (pF)	Address	Capacitance (pF)	Address	Capacitance (pF)	Address	Capacitance (pF)	
63	36.92~38.02	51	27.45~28.27	38	19.91~20.51	20	12.77~13.15	
64	37.85~38.98	52	28.14~28.98	39	20.41~21.02	21	13.09~13.48	
65	38.79~39.96	53	28.85~29.71	40	20.93~21.56	22	13.42~13.82	
66	39.76~40.95	54	29.57~30.45	41	21.45~22.09	23	13.76~14.17	
67	40.76~41.98	55	30.30~31.21	42	21.98~22.64	24	14.09~14.52	
68	41.78~43.03	56	31.06~31.99	43	22.53~23.21	25	14.44~14.88	
		57	31.84~32.80	44	23.09~23.78	26	14.81~15.26	
				45	23.67~24.38	27	15.18~15.64	
				46	24.27~25.00	28	15.56~16.03	
				47	24.87~25.61	29	15.95~16.43	
				1		30	16.35~16.84	
		1.						
					,			

Rank Width

C _{8.0V}	20	21	22	23	24	25	26	27	28	29	30
63											
64											
65											
66											
67											
68											





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