

Ordering number : EN2195F

Diffused Junction Type Silicon Diode



SVC203CP

Varactor Diode for FM Low-Voltage Electronic Tuning Use

Features

- Dual type with a good linearity of C-V characteristic. Excels in large input characteristics.
- Small-sized package (CP) usable in ultrasmall-sized sets (surface mount type).
- Applicable to FM wide band due to high capacitance ratio ($V_R=1.5$ to $9V$).

Absolute Maximum Ratings at $T_a=25^\circ C$

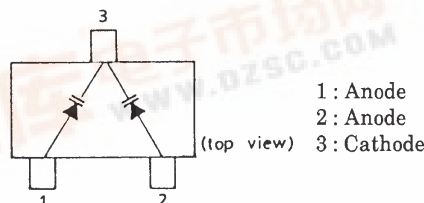
			unit
Reverse Voltage	V_R	16	V
Junction Temperature	T_j	125	$^\circ C$
Storage Temperature	T_{stg}	-55 to +125	$^\circ C$

Electrical Characteristics at $T_a=25^\circ C$

			min	typ	max	unit
Breakdown Voltage	$V(BR)_R$	$I_R=1\mu A$	16			V
Reverse Current	I_R	$V_R=10V$			50	nA
Interterminal Capacitance*	$C_{1.0V}$	$V_R=1.0V, f=1MHz$	58.80		65.98	pF
	$C_{6.0V}$	$V_R=6.0V, f=1MHz$	18.72		25.11	pF
	$C_{9.0V}$	$V_R=9.0V, f=1MHz$	10.84		13.40	pF
Quality Factor	Q	$V_R=3.0V, f=1MHz$	60			
Capacitance Ratio	C_R	$C_{1.0V}/C_{9.0V}$	4.6			
Matching Tolerance	ΔC_m	$V_R=1.0V$	$\frac{(C_{max} - C_{min})}{C_{min}} \times 100$		6.5	%
		$V_R=6.0V$			5.5	%
		$V_R=9.0V$			11.8	%

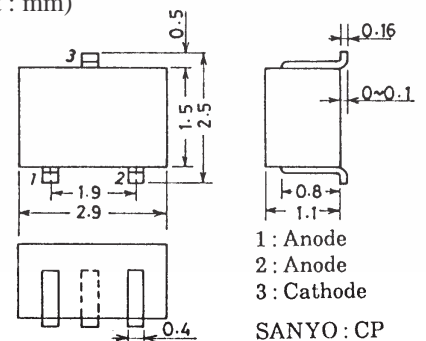
* : Capacitance value of one diode

Electrical Connection



Package Dimensions 1169A

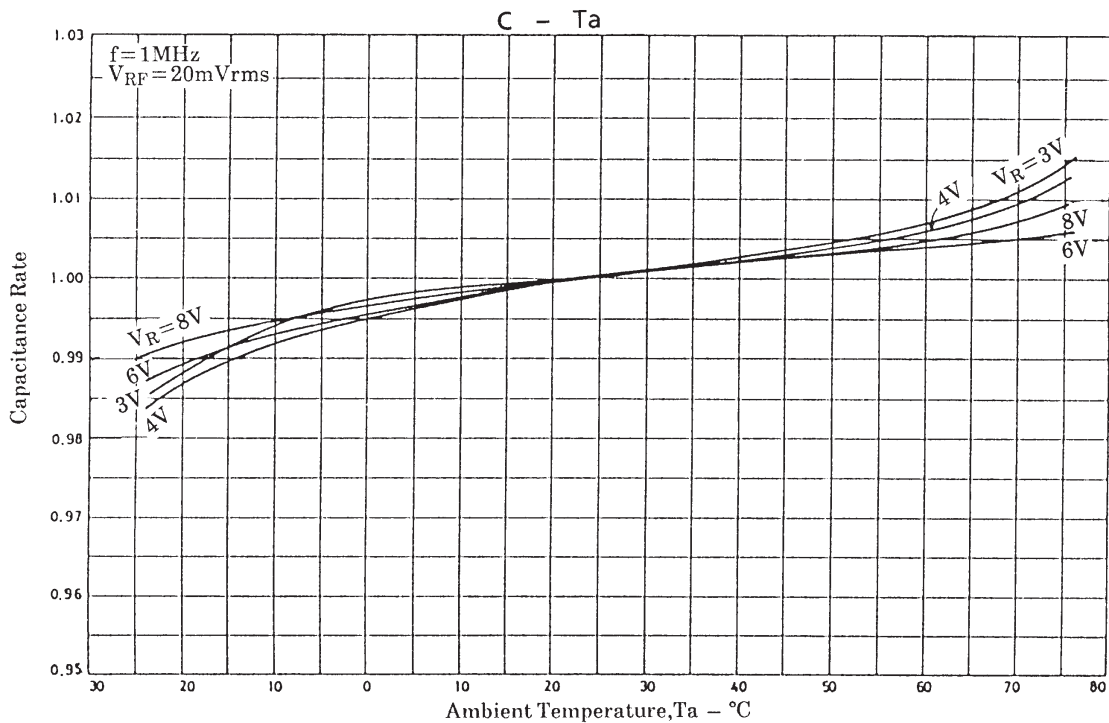
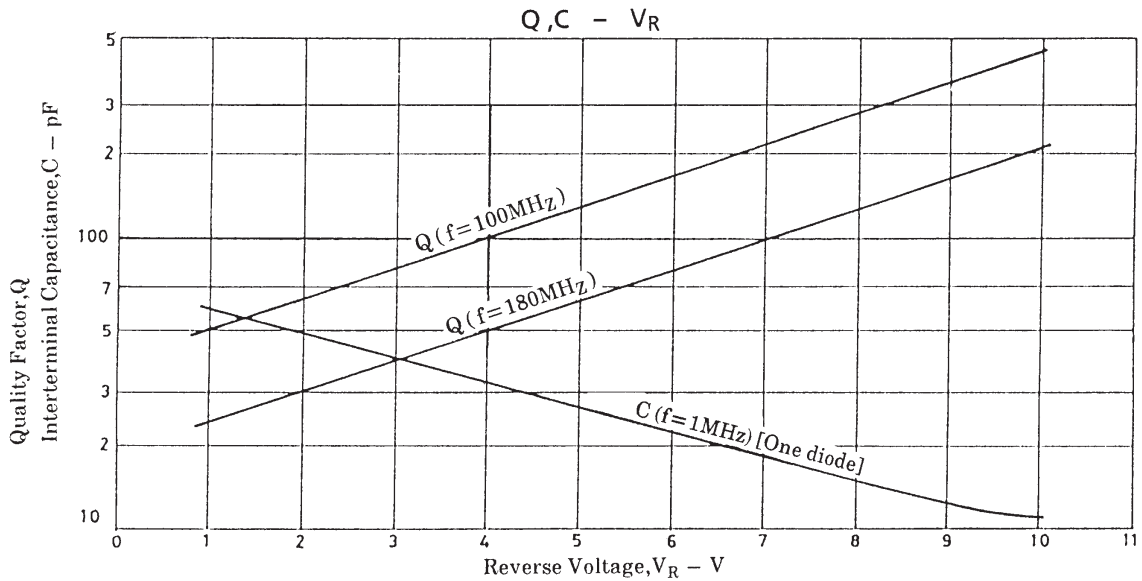
(unit : mm)



SVC203CP

Address and Capacitance Value (Reference Value)

C 1.0V		C 6.0V		C 9.0V	
Address	Capacitance (pF)	Address	Capacitance (pF)	Address	Capacitance (pF)
11	59.10	61	18.91	91	10.89
	62.92		19.95		12.17
12	61.67	62	19.76	92	11.93
	65.65	20.85	13.33		
		63	20.64		
		64	21.79		
			21.57		
		65	22.77		
			22.55		
		66	23.80		
			23.56		
			24.87		



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