

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 $T_a=25^\circ C$

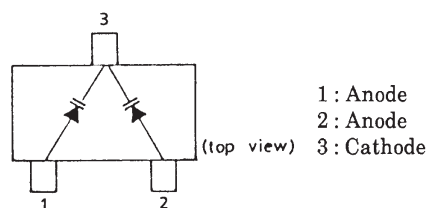
			unit
Reverse Voltage	$V_R$	16	V
Junction Temperature	$T_j$	125	$^\circ C$
Storage Temperature	$T_{stg}$	-55 to +125	$^\circ C$

### 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	$\Delta C_m$	$V_R=1.0V$	$\frac{(C_{max}   C_{min})}{C_{min}} \times 100$		6.5	%
		$V_R=6.0V$			5.5	%
		$V_R=9.0V$			11.8	%

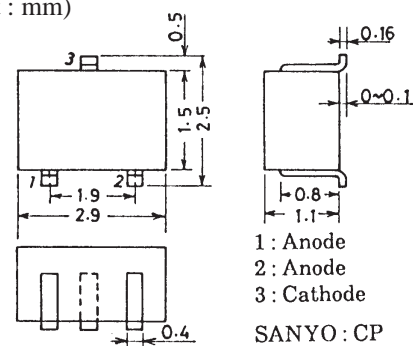
\* : Capacitance value of one diode

### Electrical Connection



### Package Dimensions 1169A

(unit : mm)



**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

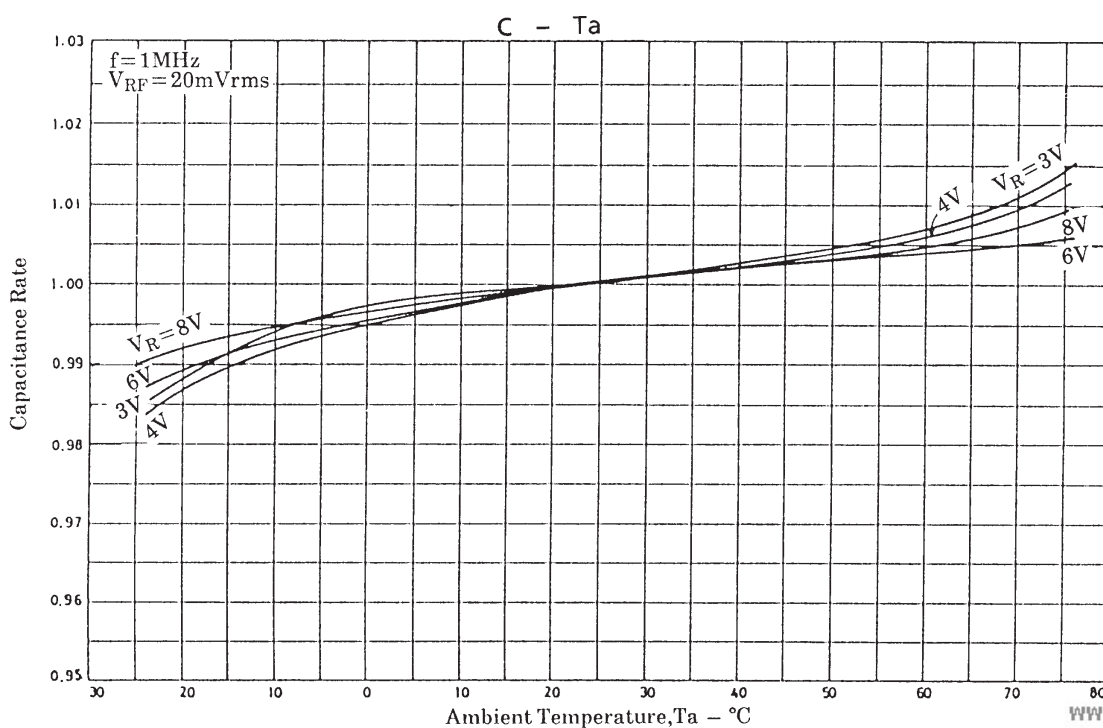
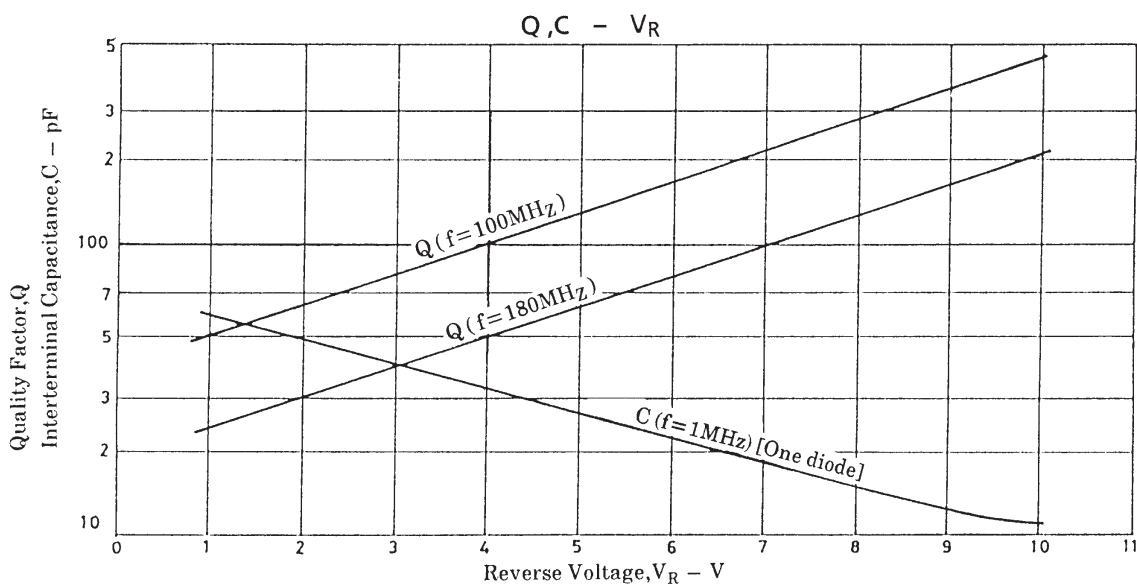
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O0397GI/52595GI (KOTO)1200MO/O268MO/6187AT, TS 8-9952 No.2195-1/3

### 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		
			21.79		
		64	21.57		
			22.77		
		65	22.55		
			23.80		
		66	23.56		
			24.87		



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