



# SVC352

## Silicon Diffused Junction Type Composite Varactor Diode, for AM Low-Voltage Electronic Tuning

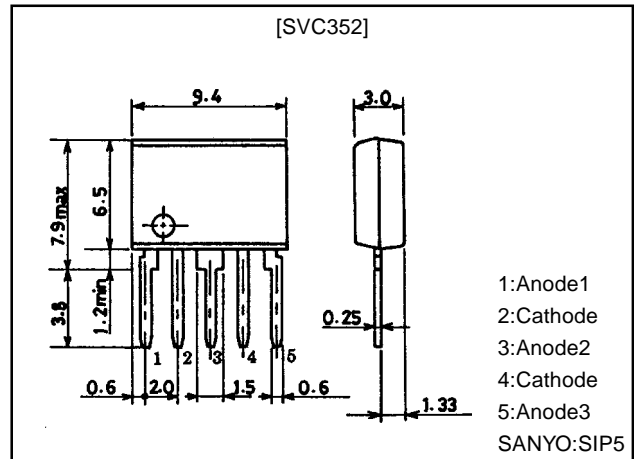
### Features

- Excellent matching characteristics because of composite type.
- The number of manufacturing processes can be reduced and automatic mounting is possible because of composite type.
- High capacitance ratio and high quality factor.

### Package Dimensions

unit:mm

1194A



### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		16	V
Junction Temperature	$T_J$		125	°C
Storage Temperature	$T_{stg}$		-55 to +125	°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 (One diode)	$I_R$	$V_R=9V$			100	nA
Interterminal Capacitance (Average)	$C_{1V}$	$V_R=1V, f=1MHz^*1$	460.0*		540.0*	pF
	$C_{6V}$	$V_R=6V, f=1MHz$		52.0		pF
	$C_{8V}$	$V_R=8V, f=1MHz$	21.0		27.0	pF
Quality Factor	$Q$	$V_R=1V, f=1MHz$	200			
Capacitance Ratio	$CR$	$C_{1.0V}/C_{8.0V}, f=1MHz$	17.5		24.5	
Matching Tolerance	$\Delta C_m^*2$	$V_R=1V$ to $8V, f=1MHz$			$\pm 2.5$	%

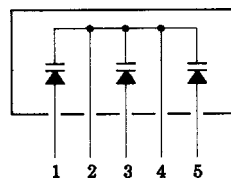
Note)\*1:1MHz signal:20mVrms

Note)\*2: $\Delta C_m = (C_{Dn} - C_{D3}) / C_{D3} \times 100$

Note)\*:The SVC352 is classified by  $C_{1V}$  as follows:

Rank	$C_{1V}$	Rank Marking
R	460.0 to 491.0pF	Green
S	482.0 to 515.0pF	Black
T	505.0 to 540.0pF	Yellow

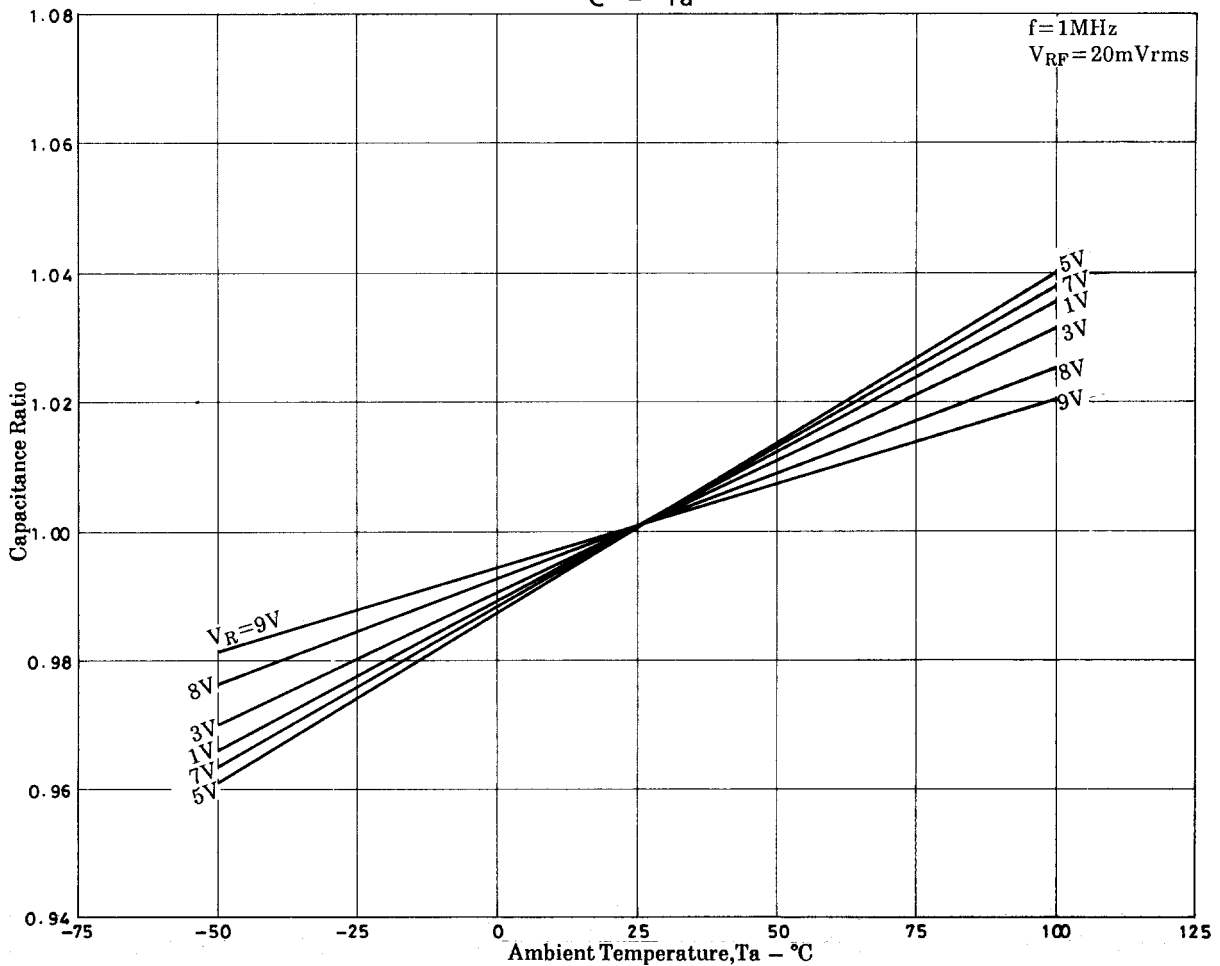
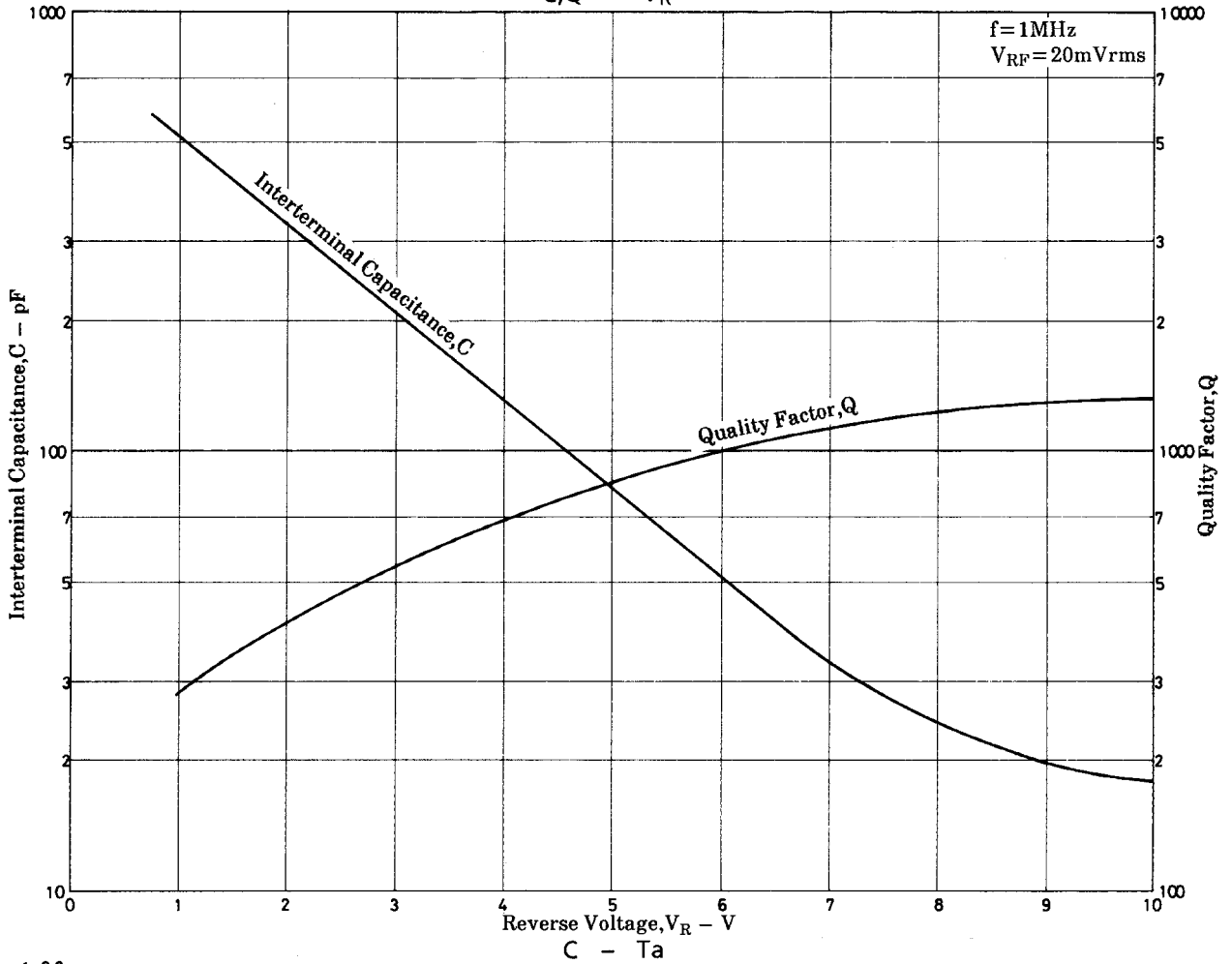
### Electrical Connection



- 1:Anode1
- 2:Cathode
- 3:Anode2
- 4:Cathode
- 5:Anode3

# SVC352

C, Q -  $V_R$



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