

## **SVC351**

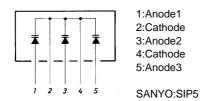
Diffused Junction Type Silicon Diode

# Composite Varactor Diode for AM Receiver Electronic Tuning Use

### **Features**

- · Execellent 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.

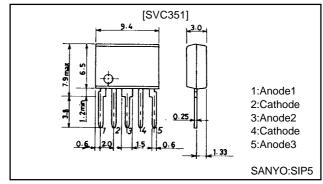
### **Electrical Connection**



### Package Dimensions

unit:mm

### 1194B



### **Specifications**

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	٧ <sub>R</sub>		16	V
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

#### Electrical Characteristics at Ta = 25°C

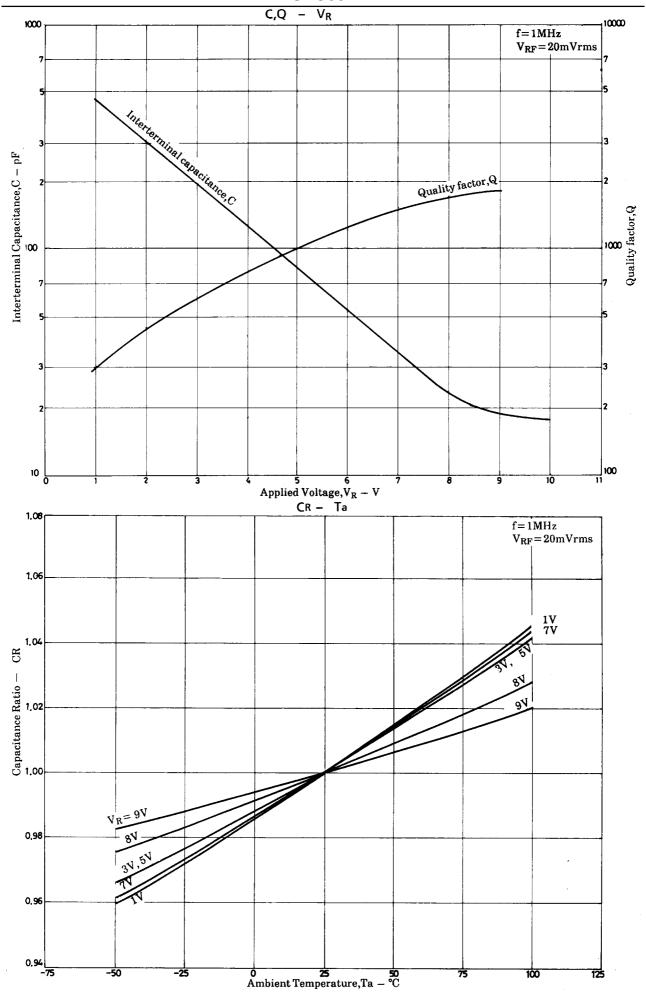
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =10μA	16			V
Reverse Current (One diode)	IR	V <sub>R</sub> =9V			100	nA
Interterminal Capacitance (Average)	C <sub>1V</sub>	V <sub>R</sub> =1V, f=1MHz*1	428.0*		500.0*	pF
	C <sub>6V</sub>	V <sub>R</sub> =6V, f=1MHz	48.0		65.0	pF
	C <sub>8V</sub>	V <sub>R</sub> =8V, f=1MHz	20.5		27.0	pF
Quality Factor	Q	V <sub>R</sub> =1V, f=1MHz	200			
Capacitance Ratio	CR	C <sub>1V</sub> /C <sub>8V</sub> , f=1MHz	16.5		23.5	
Matching Tolerance	∆Cm*2	V <sub>R</sub> =1 to 8V, f=1MHz			±2.5	%

<sup>\*1:1</sup>MHz signal:20 Vrms

<sup>\* :</sup> The SVC 351 is classified by  $C_{1V}$  as follows:

Rank	C <sub>1V</sub> (pF)
K	428.0 to 456.5
L	447.5 to 478.0
М	468.5 to 500.0

<sup>\*2 :</sup>  $\Delta Cm = (C_{Dn} - C_{D3})/C_{D3} \times 100$ 



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