

# **SVC342**

Diffused Junction Type Silicon Diode
Varactor Diode
for AM Receiver Electronic Tuning Use

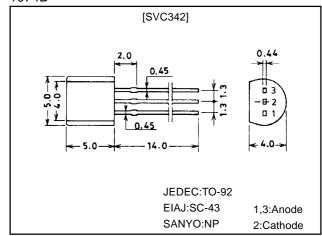
#### **Features**

- · Twin type varactor diode for low-voltage AM electronic tuning use.
- · High capacitance ratio.
- · Excellent linearity of C-V characteristic.
- · High Q.

## **Package Dimensions**

unit:mm

1074B



## **Specifications**

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

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	٧ <sub>R</sub>		16	V
Junction Temperature	Tj		100	°C
Storage Temperature	Tstg		-55 to +100	°C

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

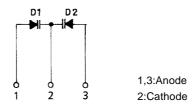
Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Breakdown Voltage	V <sub>(BR)</sub> R	I <sub>R</sub> =10μA	16			V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =9V			100	nA
Interterminal Capacitance*	C <sub>1V</sub>	V <sub>R</sub> =1V, f=1MHz	423.0		503.0	pF
	C <sub>6V</sub>	V <sub>R</sub> =6V, f=1MHz	46.0		61.0	pF
	C <sub>9V</sub>	V <sub>R</sub> =9V, f=1MHz	17.5		23.5	pF
Quality Factor	Q	V <sub>R</sub> =1V, f=1MHz	200			
Capacitance Ratio	CR	C <sub>1V</sub> /C <sub>9V</sub>	19.5			
Matching Tolerance	ΔC <sub>m</sub>	(C <sub>max</sub> -C <sub>min</sub> )/C <sub>min</sub> , (Between D1 to D2) V <sub>R</sub> =1V to 9V			0.02	

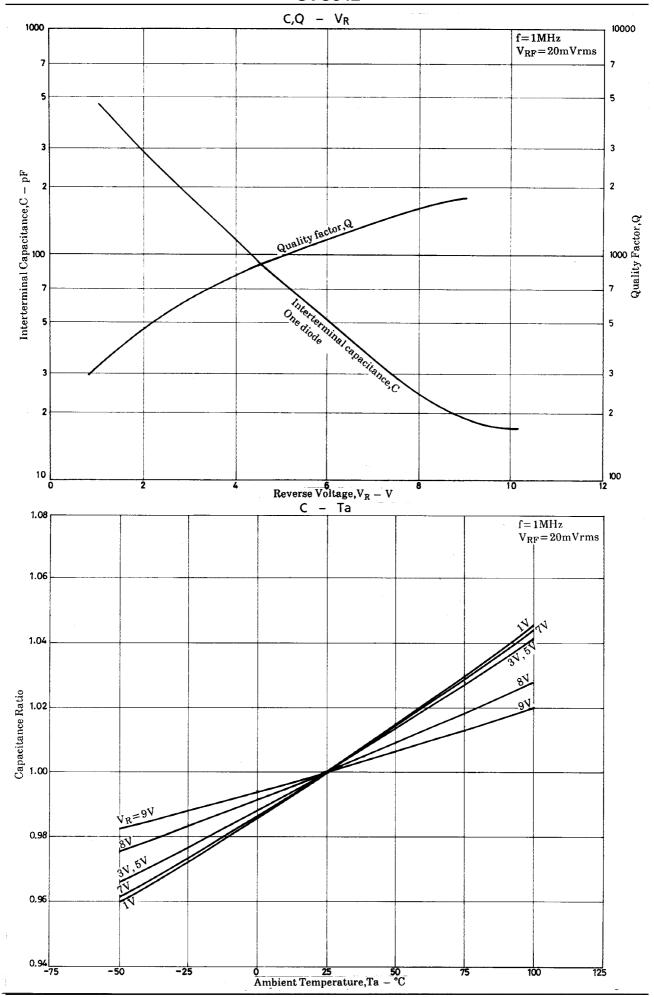
Note)\*:The value of interterminal capacitance represent the average of measurements for tow elements.

Note)\*:The SVC342 is classified by  $C_{1V}$  as follows:

Rank	C <sub>1V</sub> (pF)	
K	423.0 to 455.0	
L	445.0 to 478.0	
M	468.0 to 503.0	

### **Electrical Connection**





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