

# SVC251SPA

Diffused Junction Type Silicon Diode

# Varactor Diode for AFC, CB PLL

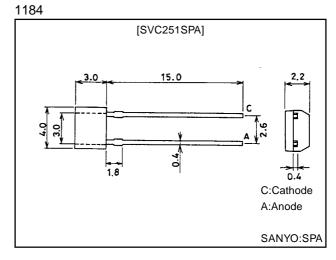
### Features

• The SVC251SPA is a varactor diode of hyper abrupt junction structure fabricated with ion implantation technology. It is intended for use in AFC, CB PLL VCO cicuitry.

- · High Q
- · High capacitance ratio

### **Package Dimensions**

unit:mm



## **Specifications**

### Absolute Maximum Ratings at $Ta = 25^{\circ}C$

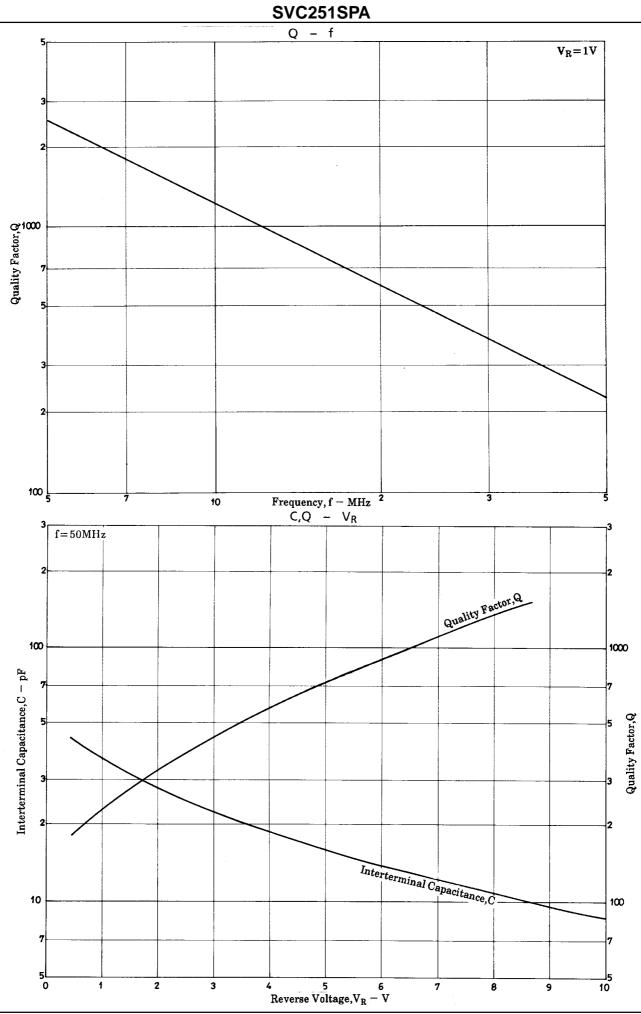
Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	VR		12	V
Junction Temperature	Tj		100	°C
Storage Temperature	Tstg		–55 to +100	°C

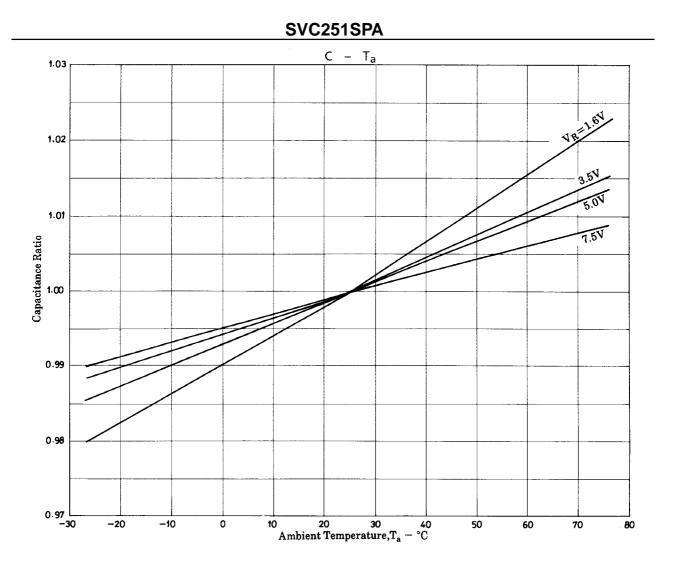
#### **Electrical Characteristics at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Onit
Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =10µA	12			V
Reverse Current	۱ <sub>R</sub>	V <sub>R</sub> =9V			200	nA
Interterminal Capacitance	C <sub>1.6V</sub>	V <sub>R</sub> =1.6V, f=1MHz	23		38	pF
	C <sub>5.0V</sub>	V <sub>R</sub> =5.0V, f=1MHz	11		19	pF
Capacitance Ratio	CR	C <sub>1.6V</sub> /C <sub>5.0V</sub>	1.7			
Series Resistance	rs	f=50MHz, V <sub>R</sub> =1V			0.6	Ω

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