**Diffused Junction Silicon Diode** 

**SVC224** 



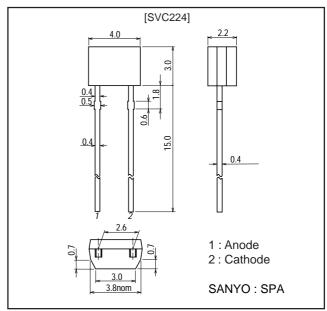
# **Varactor Diode for VCO**

#### **Features**

- · High capacitance ratio.
- · Best suited for VCO use.

### **Package Dimensions**

unit : mm 1184



## **Specifications**

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	VR		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	max	OTILL
Breakdown Voltage	V(BR)R	I <sub>R</sub> =10μA	16		V
Reverse Current	IR	V <sub>R</sub> =10V		50	nA
Interterminal Capacitance	C <sub>1.0V</sub>	V <sub>R</sub> =1.0V, f=1MHz₩	51.0	76.0	pF
	C <sub>6.0V</sub>	V <sub>R</sub> =6.0V, f=1MHz	16.0	29.0	pF
	C <sub>9.0</sub> V	V <sub>R</sub> =9.0V, f=1MHz	9.5	15.5	pF
Capacitance Ratio	CR	C <sub>1.0V</sub> / C <sub>9.0V</sub>	4.6	5.8	
Quality Factor	Q	V <sub>R</sub> =3.0V, f=100MHz	60		

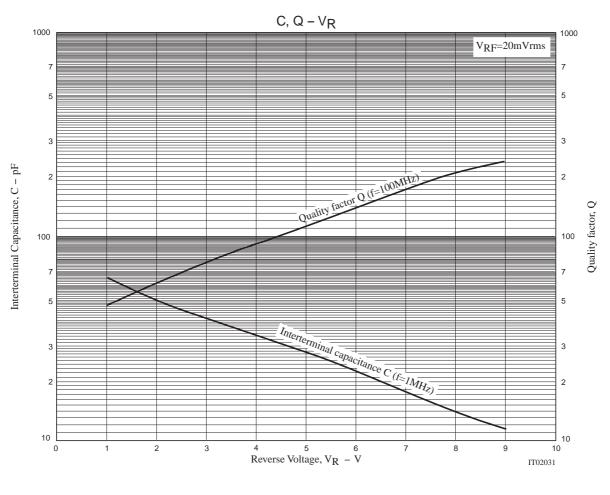
\* : 1MHz signal : 20mVrms

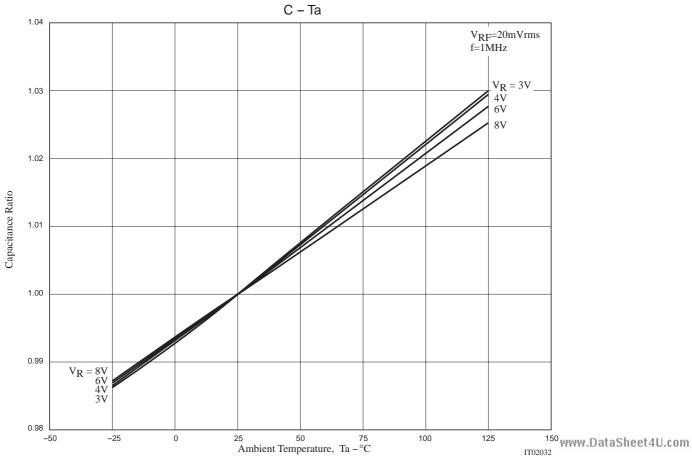
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