Silicon Diffused Junction Type



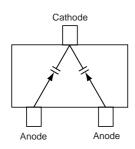
# **SVC245**

# Varactor Diode (IOCAP) for FM Receiver Electronic Tuning

## **Features**

- Twin type with a good linearity of C-V characteristic. Excels in large input characteristic.
- · Small package (CP), permitting SVC245-applied sets to be compact and slim.
- ·Applicable to FM wide band due to high capacitance ratio ( $V_R$ =2.0 to 8.0V).

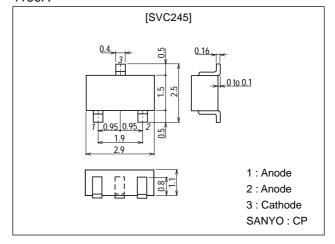
#### **Electrical Connection**



## **Package Dimensions**

unit:mm

#### 1169A



## **Specifications**

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

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V <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		
			min	typ	max	Unit
Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =10μA	16			V
Reverse Current	IR	V <sub>R</sub> =10V			50	nA
Interterminal Capacitance *	C2.0V	V <sub>R</sub> =2.0V, f=1MHz	68.45		75.94	pF
	C6.0V	V <sub>R</sub> =6.0V, f=1MHz	25.50		36.20	pF
	C8.0V	V <sub>R</sub> =8.0V, f=1MHz	19.43		24.38	pF
Quality Factor	Q	V <sub>R</sub> =3.0V, f=100MHz	80			
Capacitance Ratio	CR	C2.0V/C8.0V	3.1			
Matching Tolerance	ΔCm	V <sub>R</sub> =2.0V, f=1MHz			3.0	%
		V <sub>R</sub> =6.0V, f=1MHz			3.0	%
		V <sub>R</sub> =8.0V, f=1MHz, (Cmax-Cmin) / Cmin ×100			3.0	%

Marking: VV

Note )\*: Capacitance value of one diode

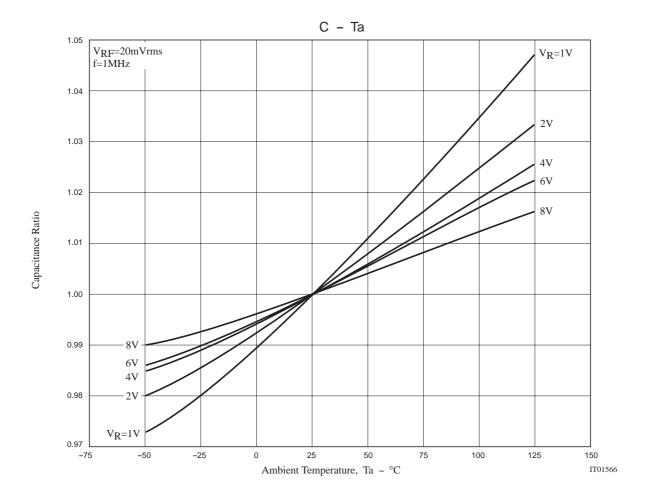
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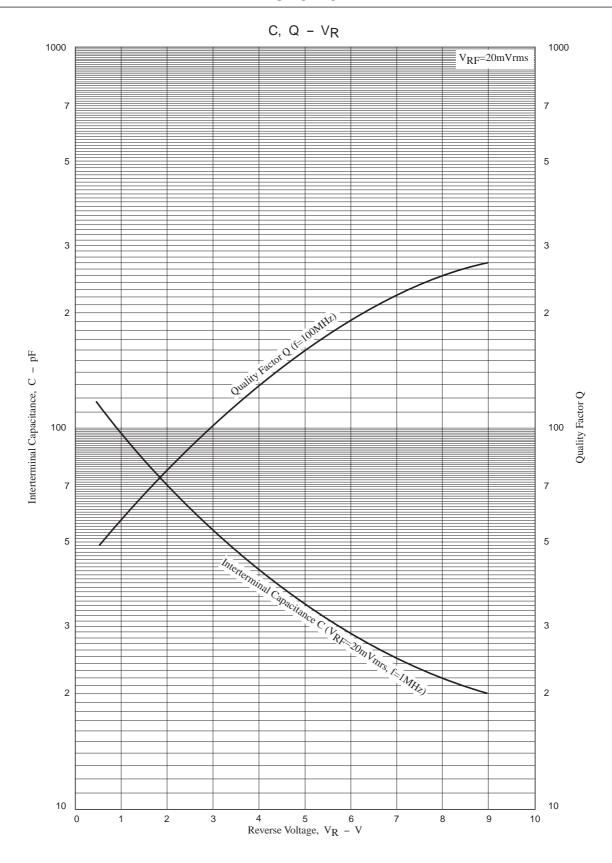
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## **SVC245**

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