Diffused Junction Type Silicon Diode



Ordering number : ENN7404

**SVC226** 

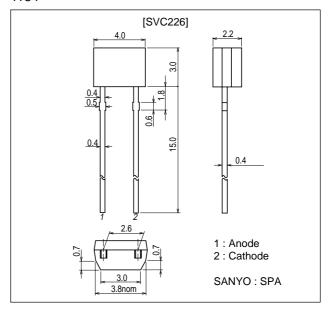
# Varactor Diode for FM Receiver Electronic Tuning Applications

#### **Features**

- · High capacitance ratio.
- Uniform capacitance-voltage characteristic provided diode to be used in combination.

## **Package Dimensions**

unit : mm 1184



# **Specifications**

Absolute Maximum Ratings at Ta=25°C

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

### Electrical Characteristics at Ta=25°C

Symbol	Conditions	Ratings			Unit
Symbol		min	typ	max	Offic
V(BR)R	I <sub>R</sub> =10μA	16			V
IR	V <sub>R</sub> =16V			10	nA
C1.0V	V <sub>R</sub> =1.0V, f=1MHz *	41.78		47.50	pF
C5.0V	V <sub>R</sub> =5.0V, f=1MHz	18.04		23.78	pF
C9.0V	V <sub>R</sub> =9.0V, f=1MHz	10.75		13.82	pF
CR	C1.0V / C9.0V	3.0			
Q	V <sub>R</sub> =3.0V, f=100MHz	80			
ΔCm	V <sub>R</sub> =1.0V, 5.0V, 9.0V, f=1MHz, (Cmax-Cmin) / CminX100			3	%
	IR C1.0V C5.0V C9.0V CR Q	V(BR)R I <sub>R</sub> =10μA I <sub>R</sub> V <sub>R</sub> =16V C1.0V V <sub>R</sub> =1.0V, f=1MHz * C5.0V V <sub>R</sub> =5.0V, f=1MHz C9.0V V <sub>R</sub> =9.0V, f=1MHz CR C1.0V / C9.0V Q V <sub>R</sub> =3.0V, f=100MHz	W(BR)R     IR=10μA     16       IR     VR=16V       C1.0V     VR=1.0V, f=1MHz *     41.78       C5.0V     VR=5.0V, f=1MHz     18.04       C9.0V     VR=9.0V, f=1MHz     10.75       CR     C1.0V / C9.0V     3.0       Q     VR=3.0V, f=100MHz     80	Symbol         Conditions           V(BR)R         IR=10µA         16           IR         VR=16V         VR=16V           C1.0V         VR=1.0V, f=1MHz *         41.78           C5.0V         VR=5.0V, f=1MHz         18.04           C9.0V         VR=9.0V, f=1MHz         10.75           CR         C1.0V / C9.0V         3.0           Q         VR=3.0V, f=100MHz         80	Symbol         Conditions           V(BR)R         IR=10μA         16           IR         VR=16V         10           C1.0V         VR=1.0V, f=1MHz *         41.78         47.50           C5.0V         VR=5.0V, f=1MHz         18.04         23.78           C9.0V         VR=9.0V, f=1MHz         10.75         13.82           CR         C1.0V / C9.0V         3.0           Q         VR=3.0V, f=100MHz         80

<sup>\* 1</sup>MHz signal : 20mVrms.

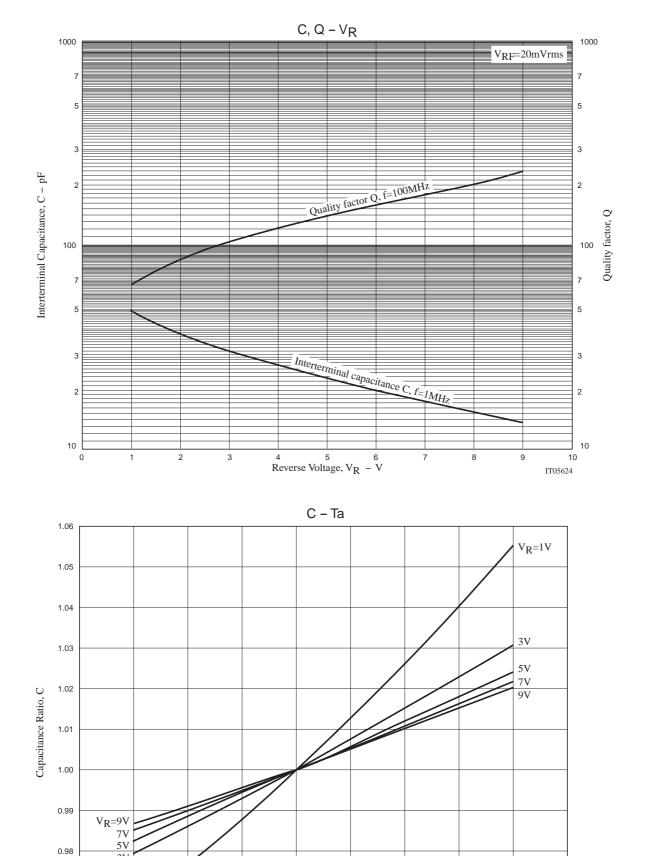
Note: Matching Tolerance is valid within each taping reel.

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25 50 Ambient Temperature, Ta – ¡C

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0.98

0.97

0.96

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