



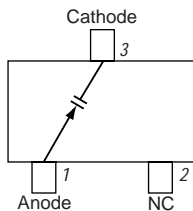
# SVC221

## Varactor Diode for FM Receiver Electronic Tuning Use

### Features

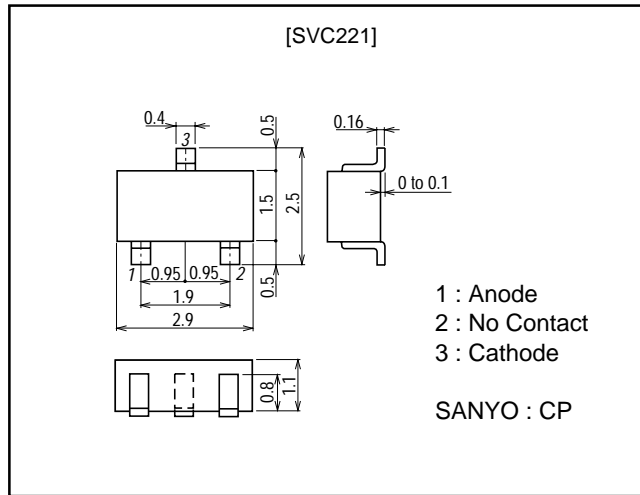
- Very small package facilitates miniaturization in end products.
- Since shipment in tape reel packing is available, automatic insertion is supported.
- High Q.
- Guaranteed matching to 4.0% at  $V_R=2V$ .

### Electrical Connection



### Package Dimensions

unit : mm  
1148A



### Specifications

#### Absolute Maximum Ratings at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		16	V
Junction Temperature	$T_j$		125	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ C$

#### Electrical Characteristics at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings		Unit
			min	max	
Breakdown Voltage	$V(BR)_R$	$I_R=10\mu A$	16		V
Reverse Current	$I_R$	$V_R=10V$		50	nA
Interterminal Capacitance	$C_{2V}$	$V_R=2.0V, f=1MHz$ *	20.80	24.80	pF
	$C_{8V}$	$V_R=8.0V, f=1MHz$	12.00	15.00	pF
Quality Factor	Q	$V_R=3.0V, f=100MHz$	100		
Capacitance Ratio	CR	$C_{2.0V} / C_{8.0V}$	1.65	1.75	
Matching Tolerance	$\Delta C_m$	$V_R=2.0V, f=1MHz (C_{max} - C_{min}) / C_{min} \times 100$		4.0	%

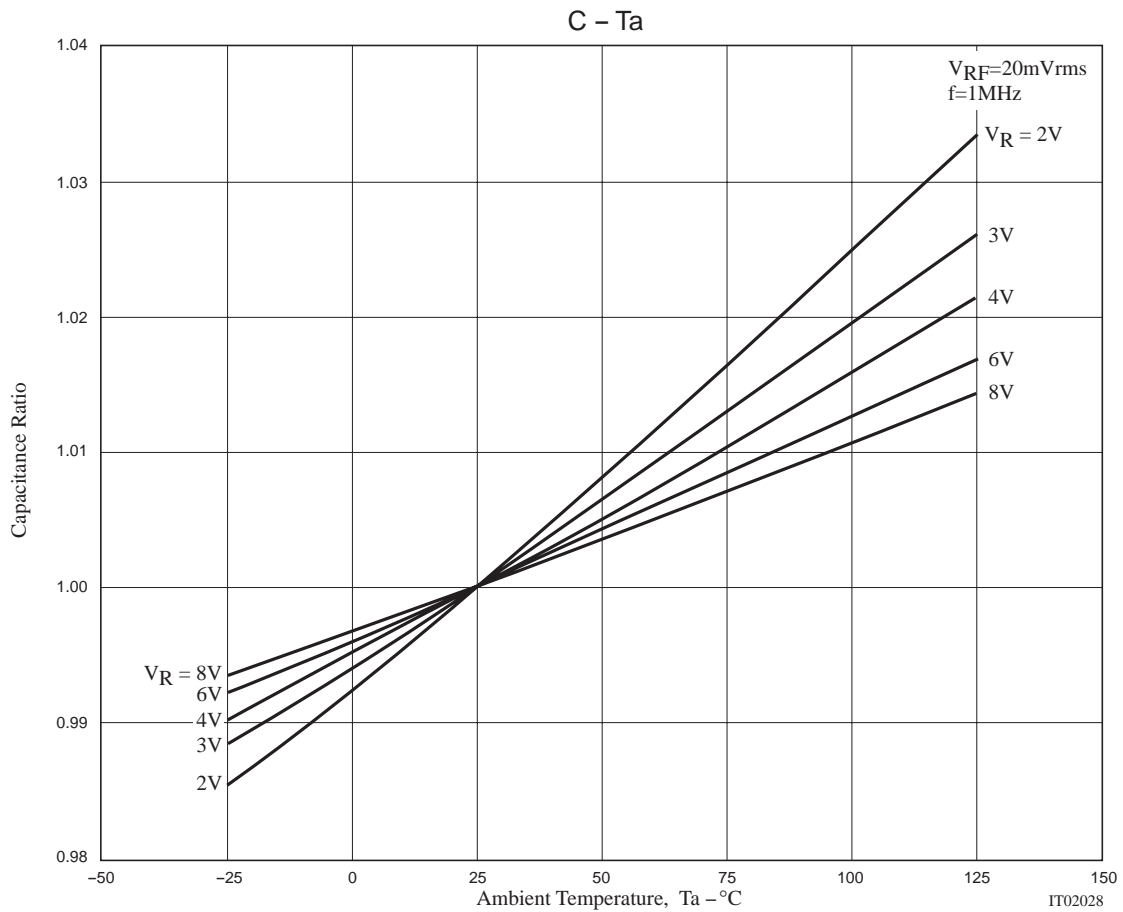
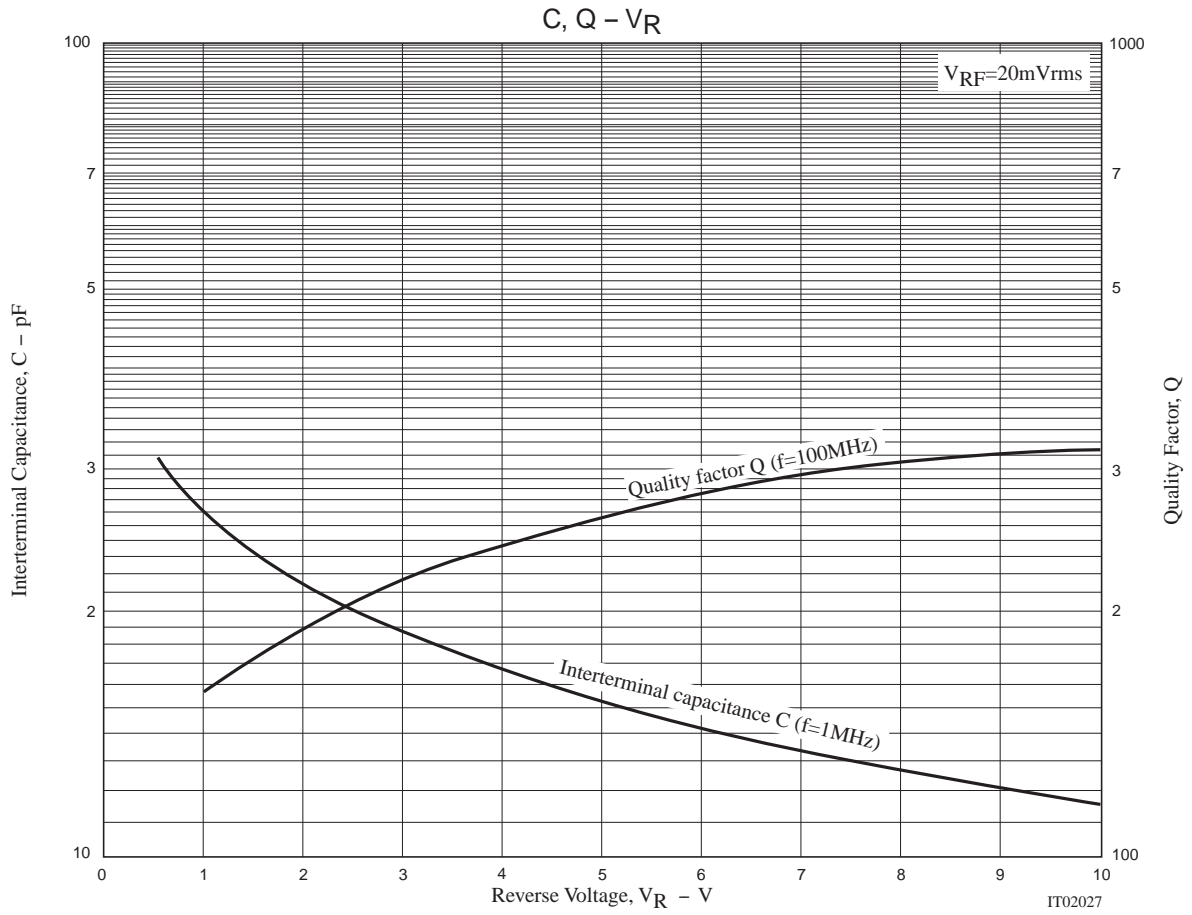
Note : Matching Tolerance is valid for the devices in each taping reel.

\* : 1MHz signal : 20mVrms

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# SVC221



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