

Diffused Junction Silicon Diode



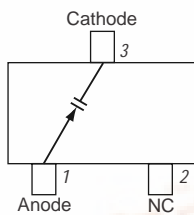
SVC221

Varactor Diode for FM Receiver Electronic Tuning Use

Features

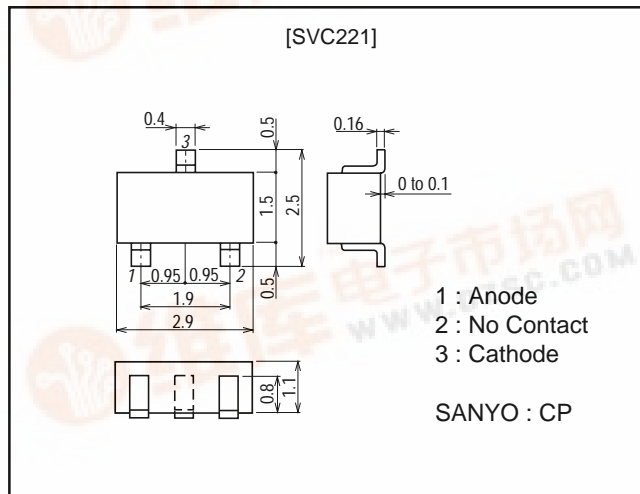
- Very small package facilitates miniaturization in end products.
- Since shipment in tape reel packing is available, automatic insertion is supported.
- High Q.
- Guaranteed matching to 4.0% at $V_R=2V$.

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	ΔC_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.

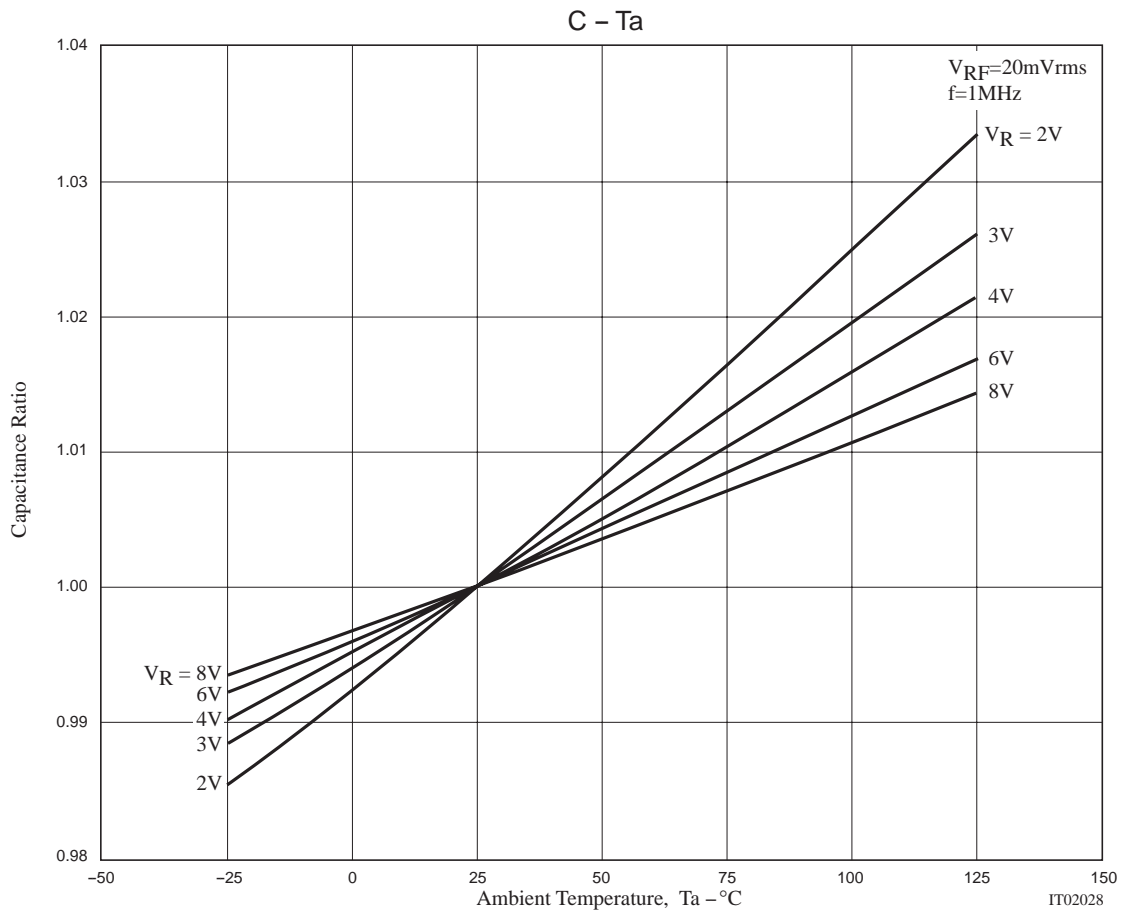
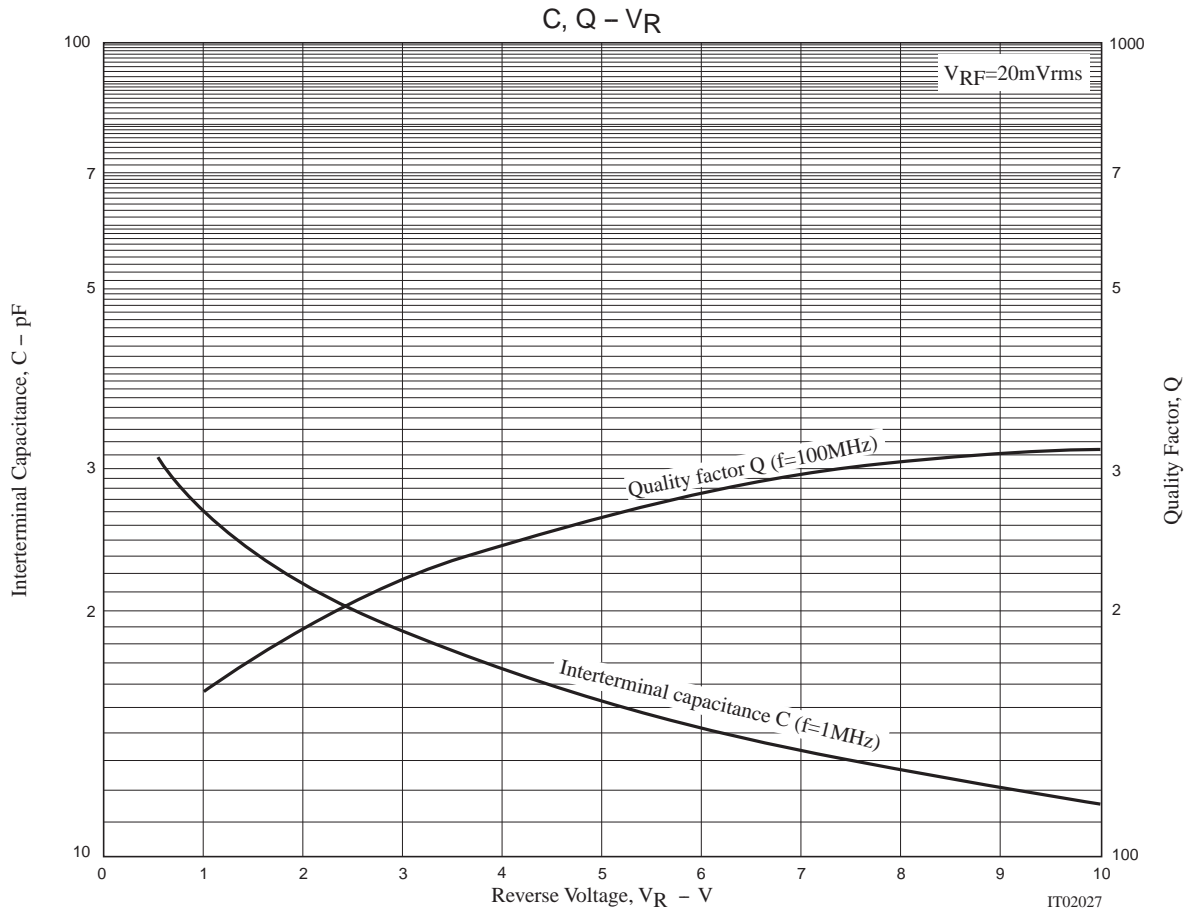
* : 1MHz signal : 20mVrms

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