Ordering number:ENN5527A

Silicon Diffused Junction Type Varactor Diode

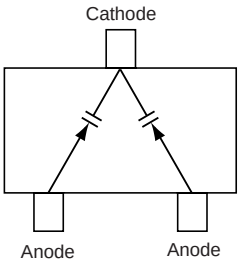
SVC231

FM Receiver Electronic Tuning Applications

Features

- Twin type varactor diode having an excellent large input characteristic and intended for use in low-voltage (high-voltage) FM electronic tuning applications.
- Small-sized package (CP), permitting SVC231-applied sets to be compact and slim.
- Possible to offer the SVC231 devices in a tape reel packaging, which facilitates automatic insertion.
- High Q.

Electrical Connection

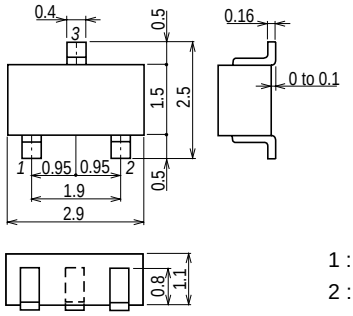


Package Dimensions

unit:mm

1169A

[SVC231]



1 : Anode
2 : Anode
3 : Cathode
SANYO : CP

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		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	typ	max	
Breakdown Voltage	$V_{(BR)R}$	I_R=10μA	16			V
Reverse Current	I_R	V_R=10V			50	nA
Interterminal Capacitance *	C2V	V_R=2.0V, f=1MHz	43.89		51.02	pF
	C8V	V_R=8.0V, f=1MHz	17.65		21.50	pF
Quality Factor	Q	V_R=3.0V, f=100MHz	100			
Capacitance Ratio	CR	C2.0V/C8.0V	2.3		2.6	
Matching Tolerance	ΔCm	V_R=2.0V, 8.0V, f=1MHz, (Cmax-Cmin) / Cmin ×100			3	%

Note)* : Capacitance value of one diode
Marking : RV

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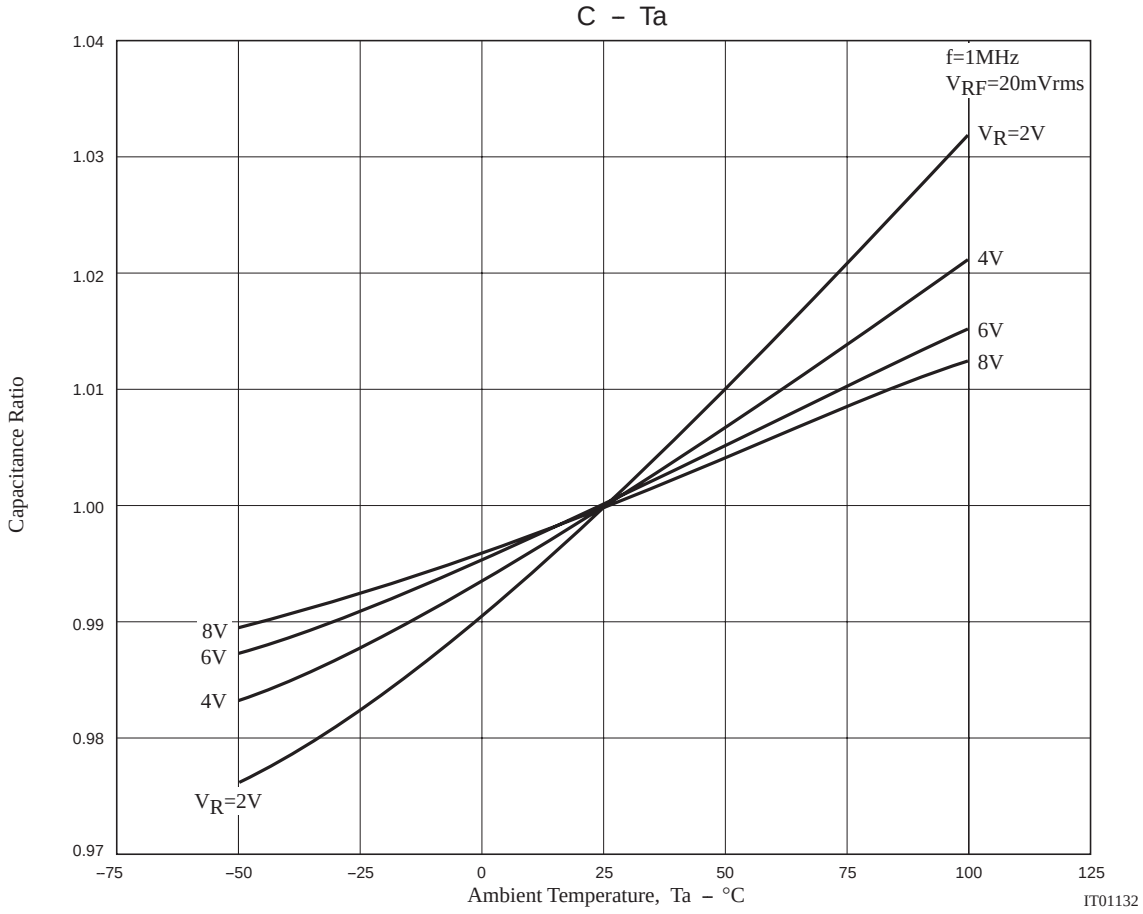
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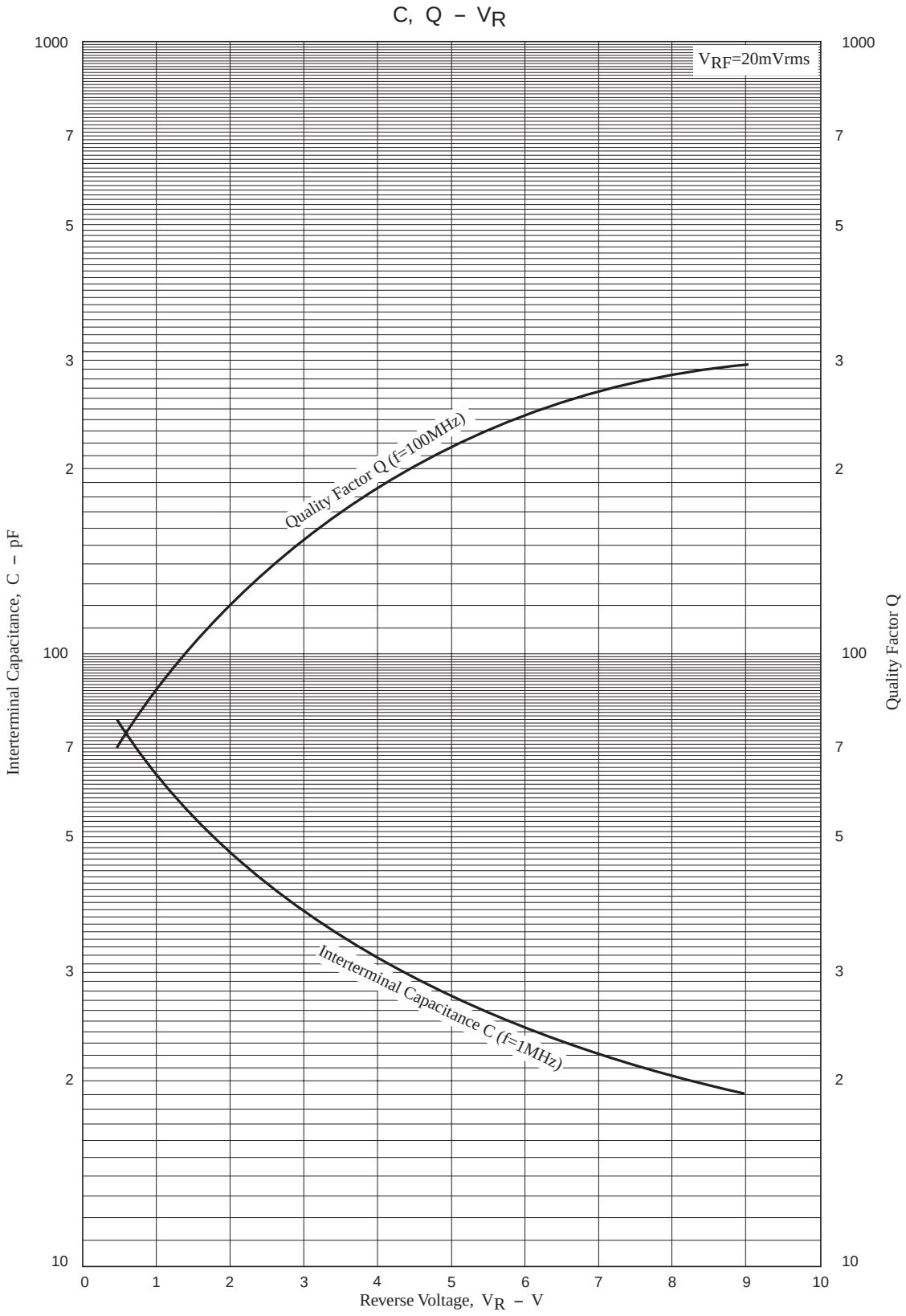
Address and Capacitance Value [pF]

V_R=2V		V_R=8V	
Address	Capacitance [pF]	Address	Capacitance [pF]
22	43.89 to 45.21	82	17.65 to 18.20
23	44.93 to 46.31	83	18.03 to 18.63
24	46.03 to 47.16	84	18.46 to 19.10
25	47.45 to 48.63	85	18.92 to 19.56
26	48.34 to 49.82	86	19.38 to 20.03
27	49.52 to 51.02	87	19.85 to 20.53
—	—	88	20.35 to 21.02
—	—	89	20.84 to 21.50

SVC231 Rank Address

		C8V							
		82	83	84	85	86	87	88	89
C2V	22	■	■	■					
	23		■	■	■	■			
	24			■	■	■	■		
	25				■	■	■	■	
	26					■	■	■	■
	27						■	■	■




C, Q – V_R
V_{RF}=20mVrms
Quality Factor Q (f=100MHz)
Interterminal Capacitance C (f=1MHz)
Interterminal Capacitance, C – pF
Quality Factor Q
Reverse Voltage, V_R – V
1000
7
5
3
2
100
7
5
3
2
10
0
1
2
3
4
5
6
7
8
9
10

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