



# SVC347

## Varactor Diode (IOCAP) for AM Receiver Electronic Tuning

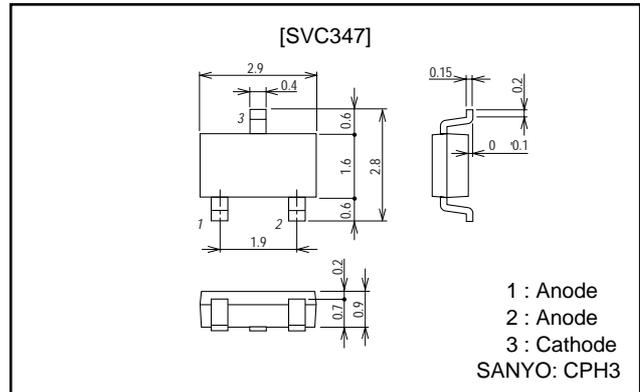
### Features

- Twin type varactor diode for AM electronic tuning use.
- Miniaturization and high-integration of tuner sets can be easily achieved due to the small package.
- High capacitance ratio and high quality factor.
- Provided in a tape reel packaging.
- Surface mount type.

### Package Dimensions

unit: mm

1291



### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Reverse voltage	$V_R$		16	V
Junction temperature	$T_j$		125	°C
Storage temperature	$T_{stg}$		-55 to +125	°C

#### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown voltage	$V_{(BR)R}$	$I_R=10\mu A$	16			V
Reverse current (One diode)	$I_R$	$V_R=9V$			100	nA
Interterminal capacitance (Capacitance value of one diode)	$C_{1V}$	$V_R=1V, f=1MHz *1$	470*		535*	pF
	$C_{6V}$	$V_R=6V, f=1MHz$		55		pF
	$C_{8V}$	$V_R=8V, f=1MHz$	20		26	pF
Quality factor	Q	$V_R=1V, f=1MHz$	200			
Capacitance ratio	CR	$C_{1V} / C_{8V}, f=1MHz$	18.5			
Matching tolerance *2	$\Delta C_m$	$(C_{max} - C_{min}) / C_{min} \times 100$ $V_R=1V, f=1MHz$ $V_R=6V, f=1MHz$ $V_R=8V, f=1MHz$			2.5	%
					3.0	%
					3.0	%

\*1 : 1MHz signal : 20mVrms

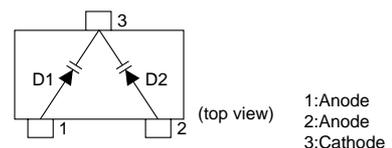
\*2 : Matching tolerance between D1 and D2

\* : The SVC347 is classified based on C1V capacitance

as shown in the table below :

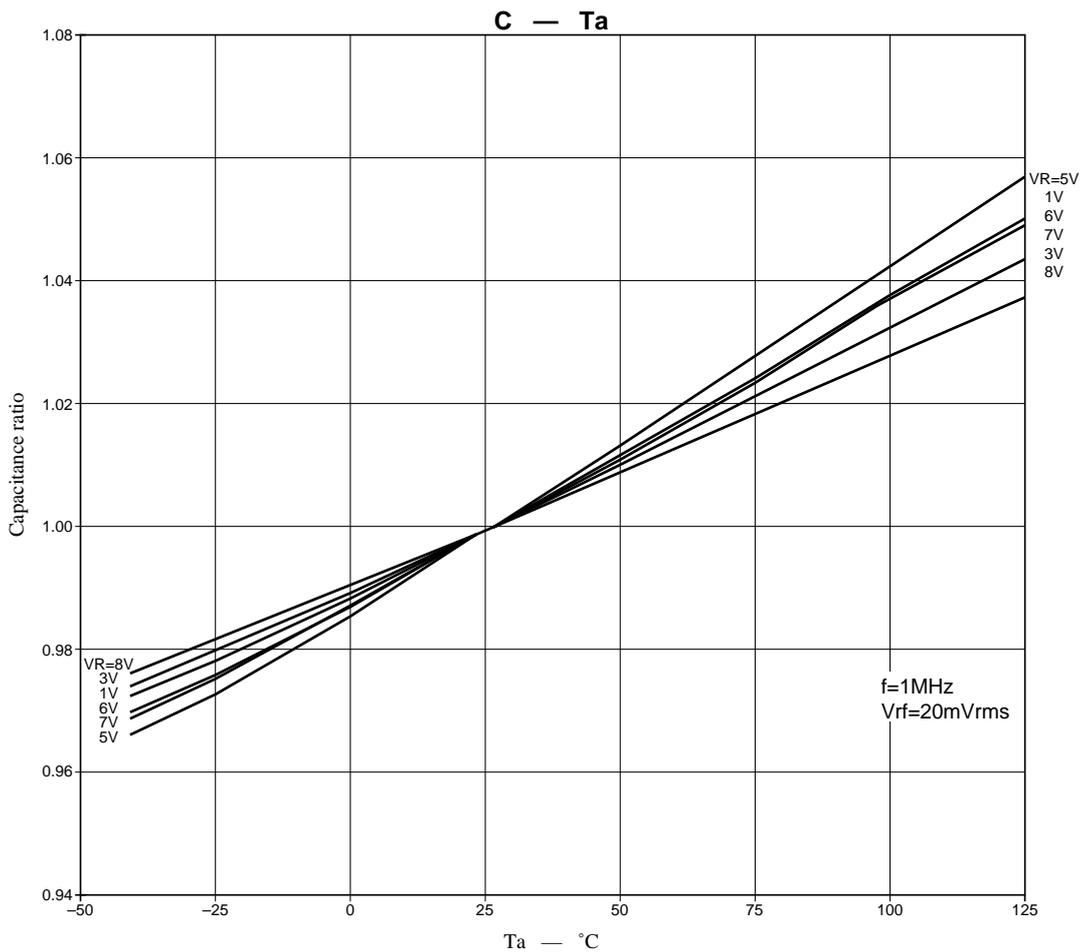
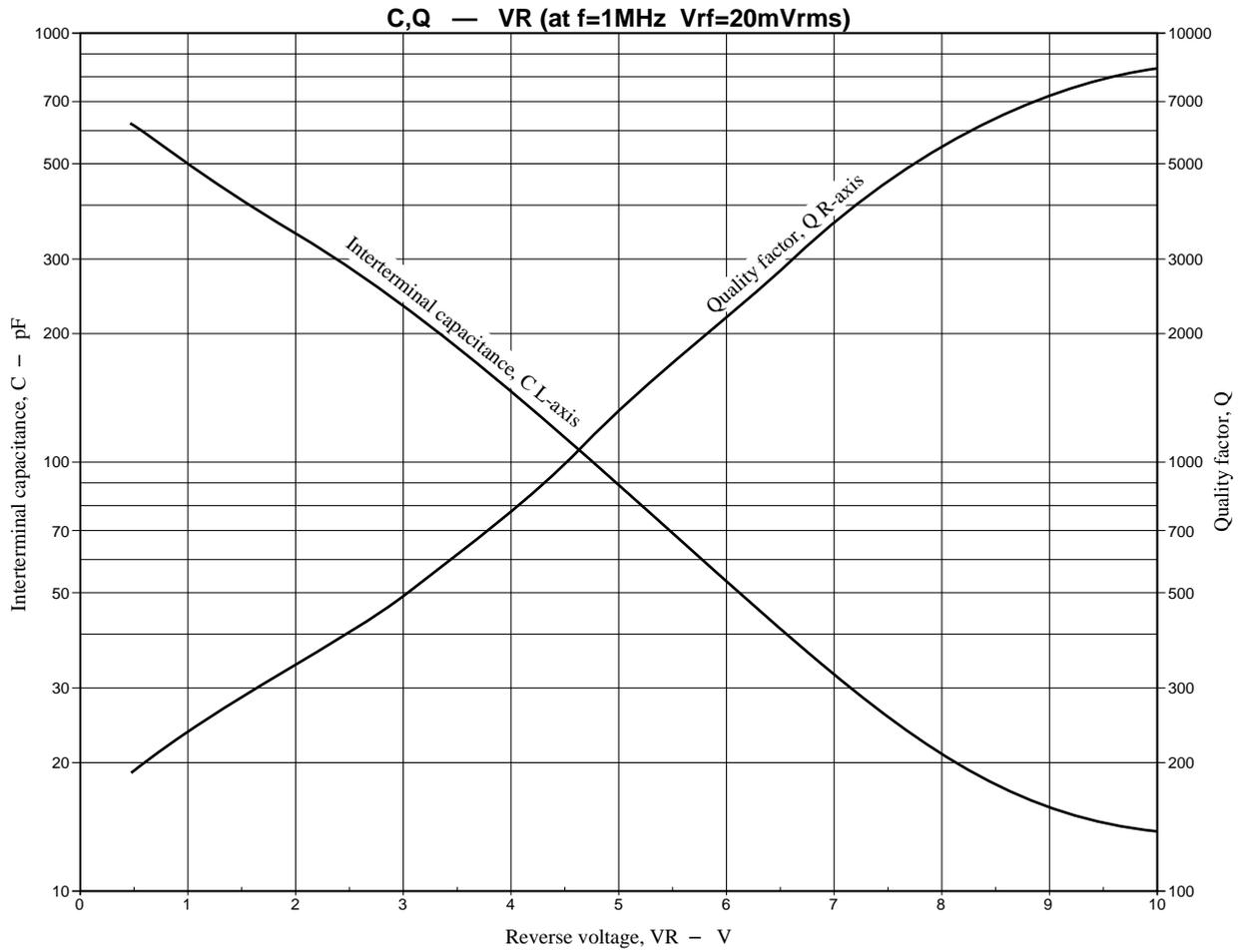
Rank	C1V (pF)
S	470 to 505
T	495 to 535

### Electrical Connection



A09978

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