

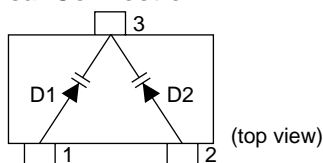


## Varactor Diode (IOCAP) for AM Reciver Electronic Tuning

### 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.

### Electrical Connection



1:Anode  
2:Anode  
3:Cathode

A09978

### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC\ max}$	Quiescent time	4.5	V
Allowable power dissipation	$P_d\ max$		300	mW
Operating temperature	$T_{opr}$		- 20 to +75	°C
Storage temperature	$T_{stg}$		- 40 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*		525*	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	$CR$	$C_{1.0V}/C_{8.0V}, f=1MHz$	18.5			
Matching Tolerance*2	$\Delta C_m$	$(C_{max}-C_{min})/C_{min} \times 100, V_R=1V, f=1MHz$			1.5	%
		$V_R=6V, f=1MHz$			2.0	%
		$V_R=8V, f=1MHz$			2.0	%

Note)\*1:1MHz signal:20mVrms

Note)\*2:Matching tolerance between D1 and D2

Note)\*:The SVC347 is classified by  $C_{1V}$  capacitance

as shown in the table below:

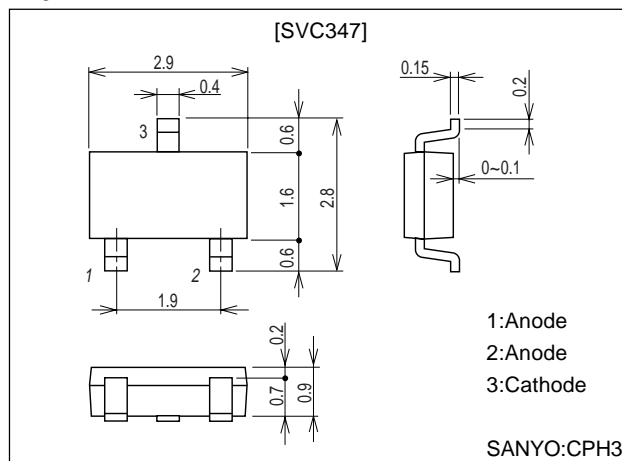
Rank	$C_{1V}(pF)$
S	470 to 505
T	485 to 525

Note:Marking:V1

### Package Dimensions

unit:mm

1291



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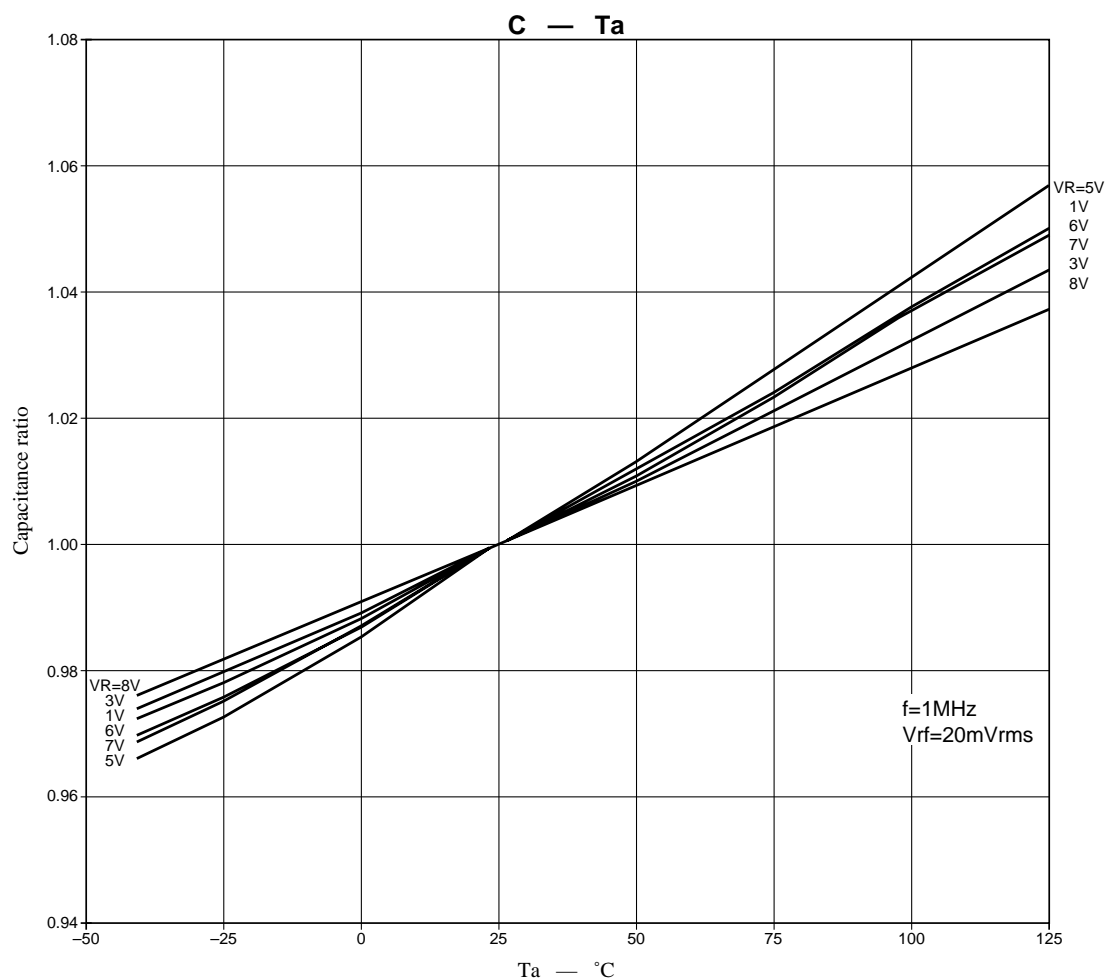
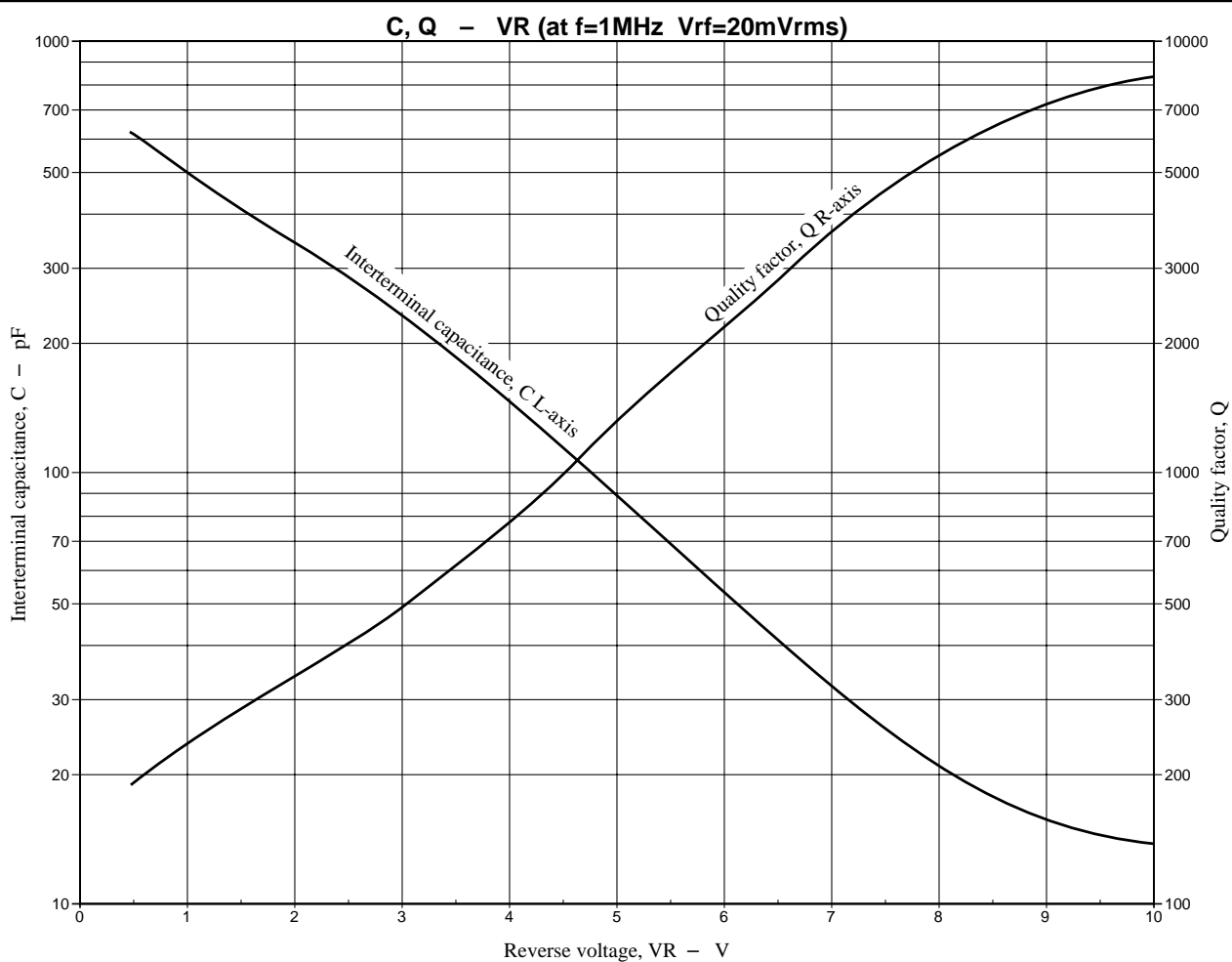
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N1098GI/52098GI/O1497GI (KOTO) No.5816-1/3

# SVC347



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