

**SVC347**

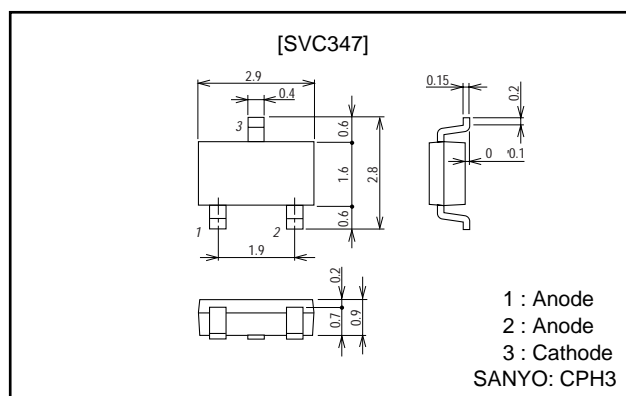
Varactor Diode (IOCAP) for AM Receiver Electronic Tuning

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	ΔC_m	$(C_{max} - C_{min}) / C_{min} \times 100$				
		$V_R=1V, f=1MHz$			2.5	%
		$V_R=6V, f=1MHz$			3.0	%
		$V_R=8V, f=1MHz$			3.0	%

*1 : 1MHz signal : 20mVrms

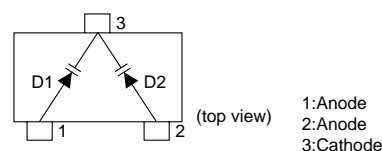
*2 : Matching tolerance between D1 and D2

* : 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

1: Anode
2: Anode
3: Cathode

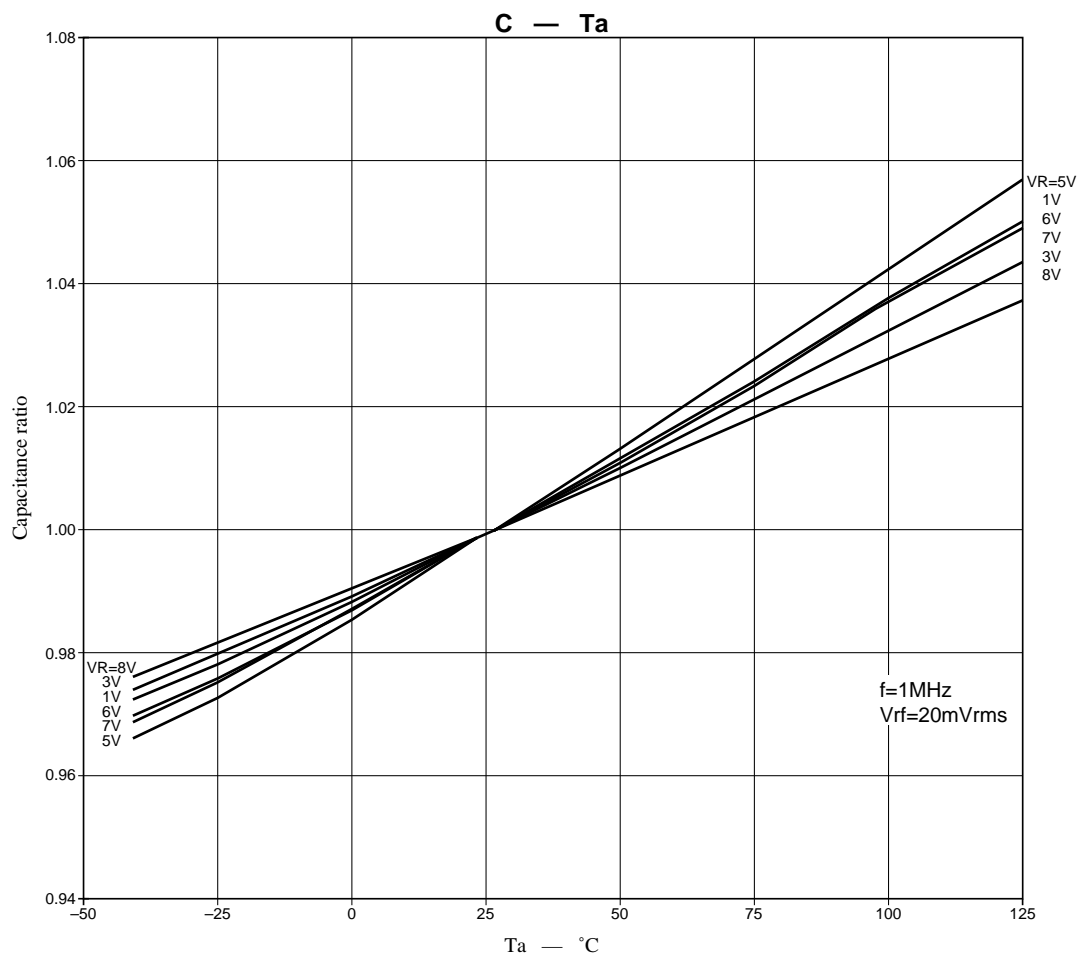
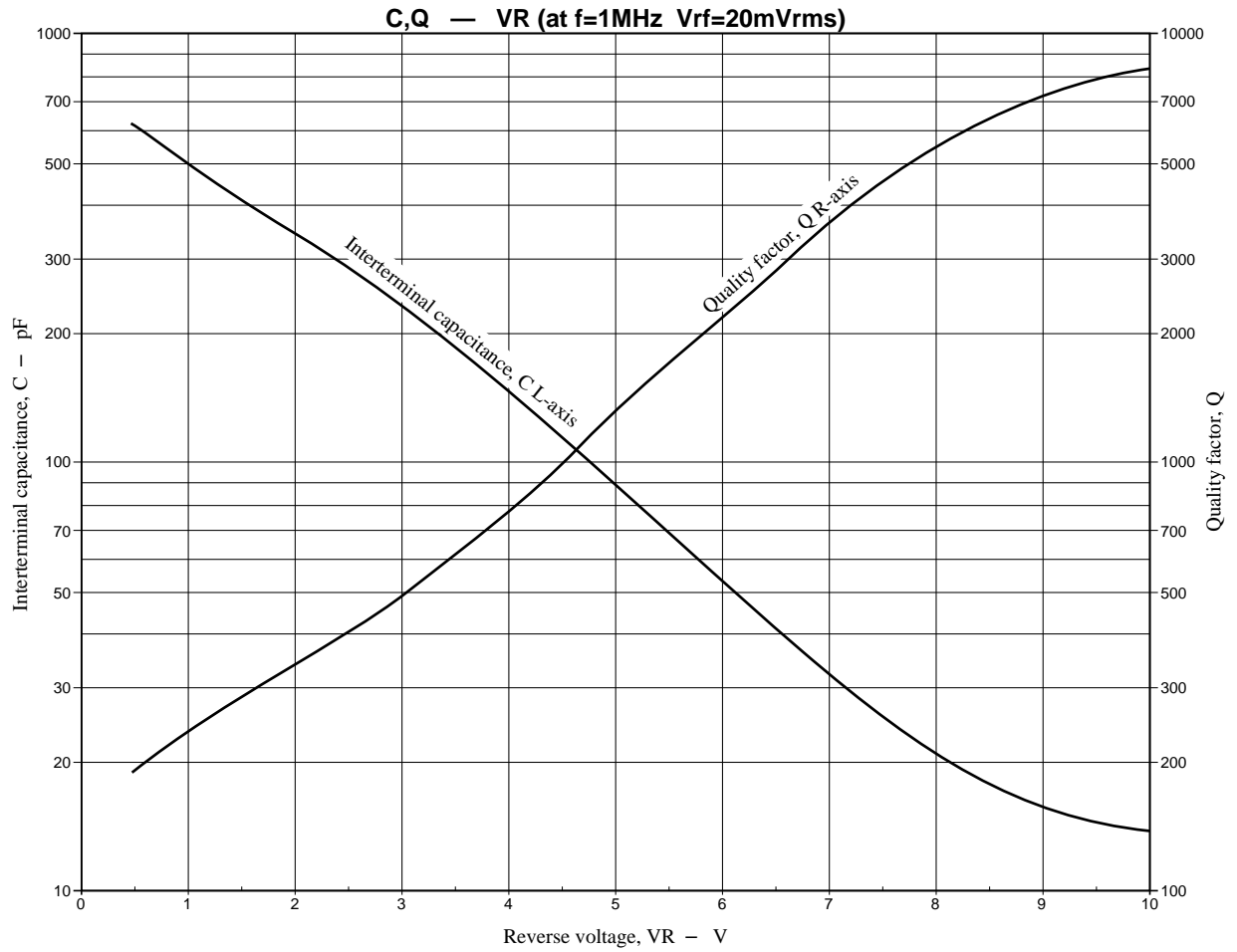
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SANYO Electric Co.,Ltd. Semiconductor Business Headquarters

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

O1497GI (KOTO) No.5816-1/3

SVC347



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