



# SVC344

Silicon Diffused Junction Type  
Varactor Diode

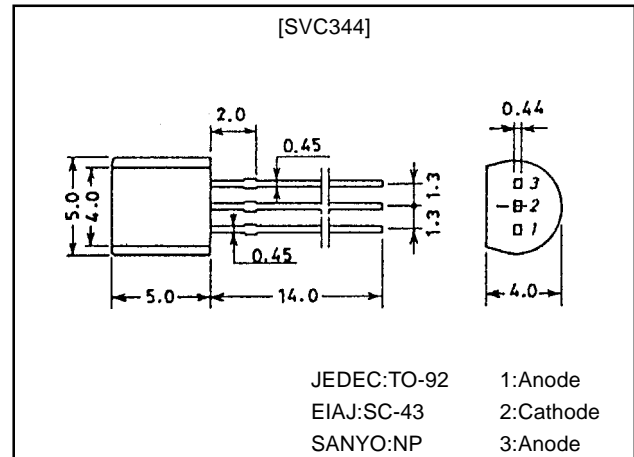
for AM Low-Voltage Electronic Tuning

## Features

- Twin type varactor diode for low-voltage AM electronic tuning applications.
- Low operating voltage ( $\leq 4.5V$ ).
- High Q.

## Package Dimensions

unit:mm  
1271



## Specifications

Absolute Maximum Ratings at  $T_a = 25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		30	V
Junction Temperature	$T_J$		125	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ C$

Electrical Characteristics at  $T_a = 25^\circ C$

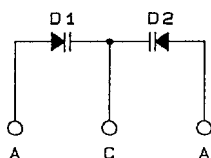
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	30			V
Reverse Current	$I_R$	$V_R=20V$			100	nA
Interterminal Capacitance*1	$C_{1.0V}$	$V_R=1.0V, f=1MHz^*2$	410.0	430.0	445.0	pF
	$C_{3.0V}$	$V_R=3.0V, f=1MHz$	70.0	95.0	120.0	pF
	$C_{4.5V}$	$V_R=4.5V, f=1MHz$	210.0	23.5	26.0	pF
Quality Factor	Q	$V_R=1.0V, f=1MHz$	200			
Capacitance Ratio	CR	$C_{1.0V}/C_{4.5V}$	15.0			
Matching Tolerance*3	$\Delta C_{m1}$	$V_R=1.0V, f=1MHz$			2.0	%
	$\Delta C_{m2}$	$V_R=3.0V, f=1MHz$			3.0	%
	$\Delta C_{m3}$	$V_R=4.5V, f=1MHz$			3.0	%

Note)\*1: The value of interterminal capacitance represent the average of measurements for tow elements.

Note)\*2: 1MHz signal:20mVrms

Note)\*3:  $\Delta C_m = (C_{max} - C_{min}) / C_{min} \times 100$  Between D1 and D2

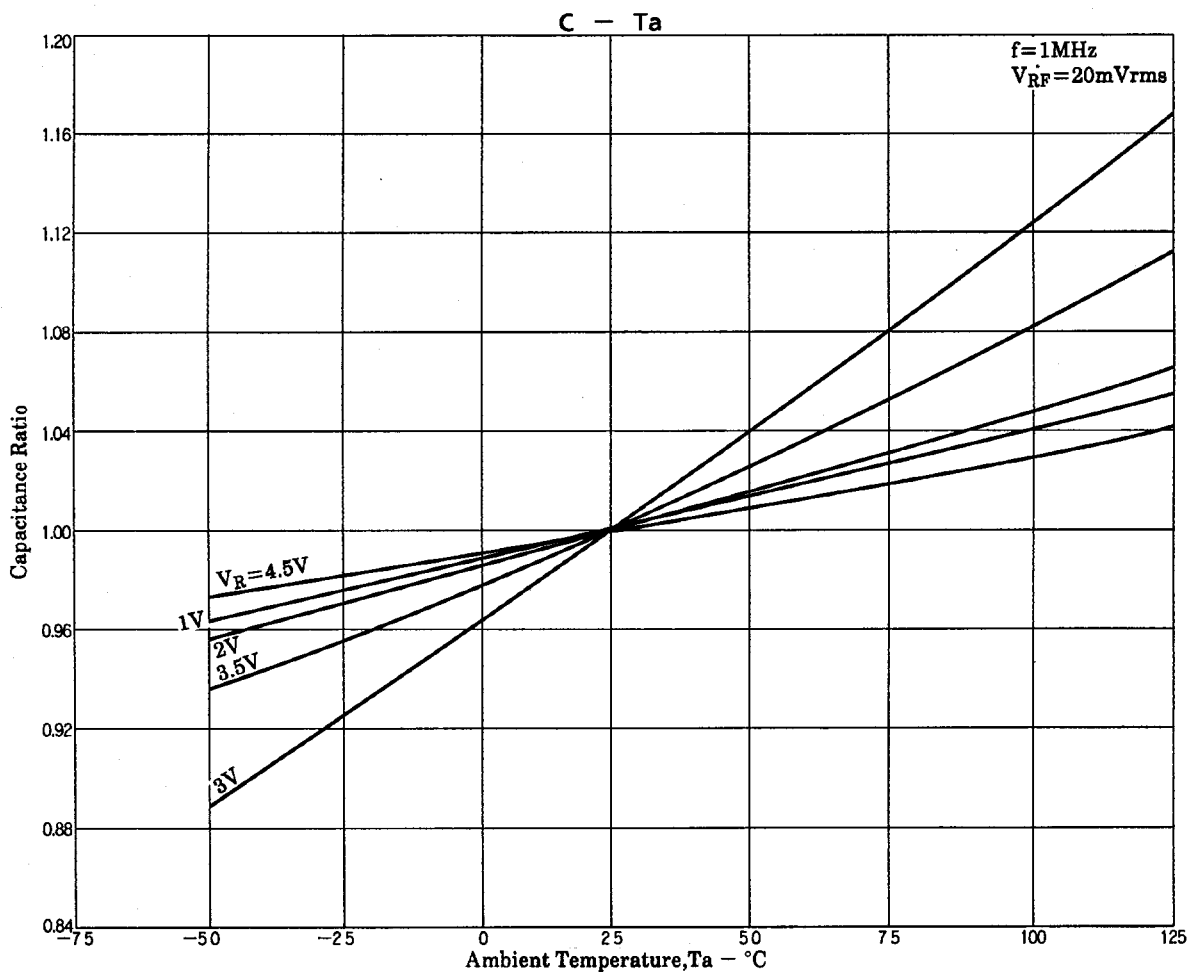
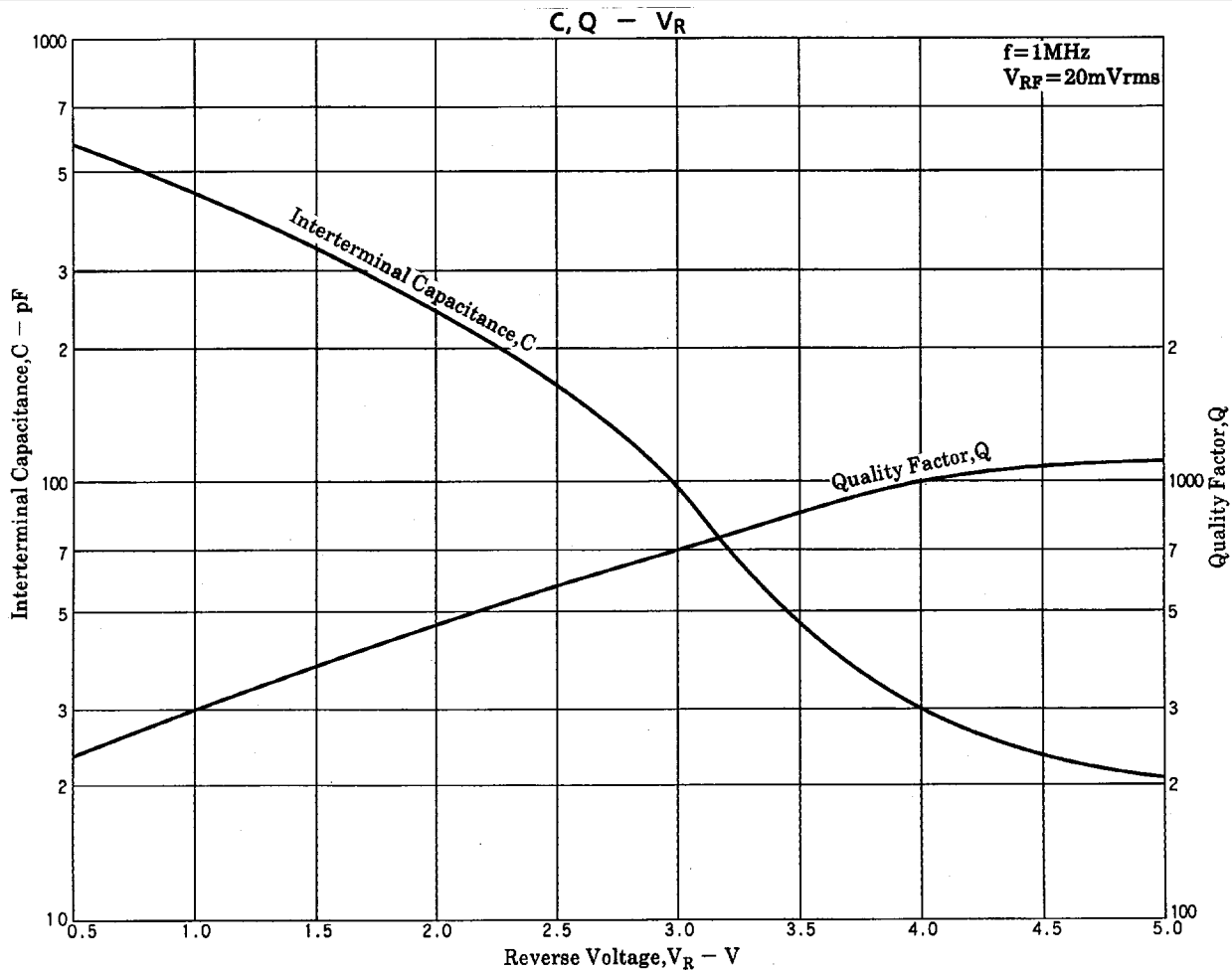
## Electrical Connection



**SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquarters**

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

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