

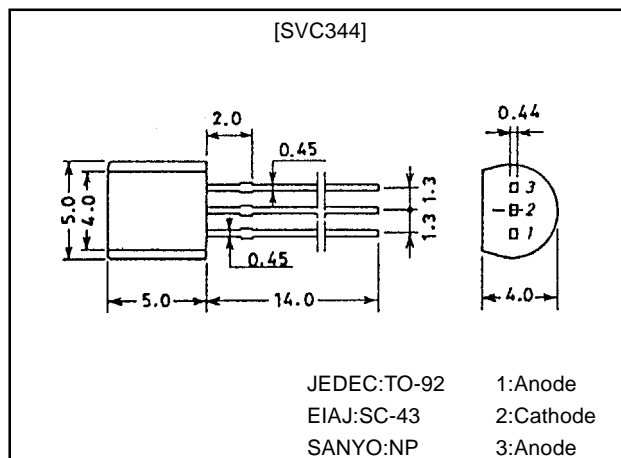
**SANYO****SVC344**Silicon Diffused Junction Type  
**Varactor Diode****for AM Low-Voltage Electronic Tuning****Features**

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

**Package Dimensions**

unit:mm

1271

**Specifications****Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

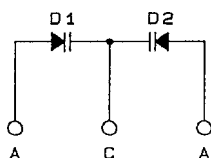
Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		30	V
Junction Temperature	$T_J$		125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

**Electrical Characteristics at  $T_a = 25^\circ\text{C}$** 

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

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

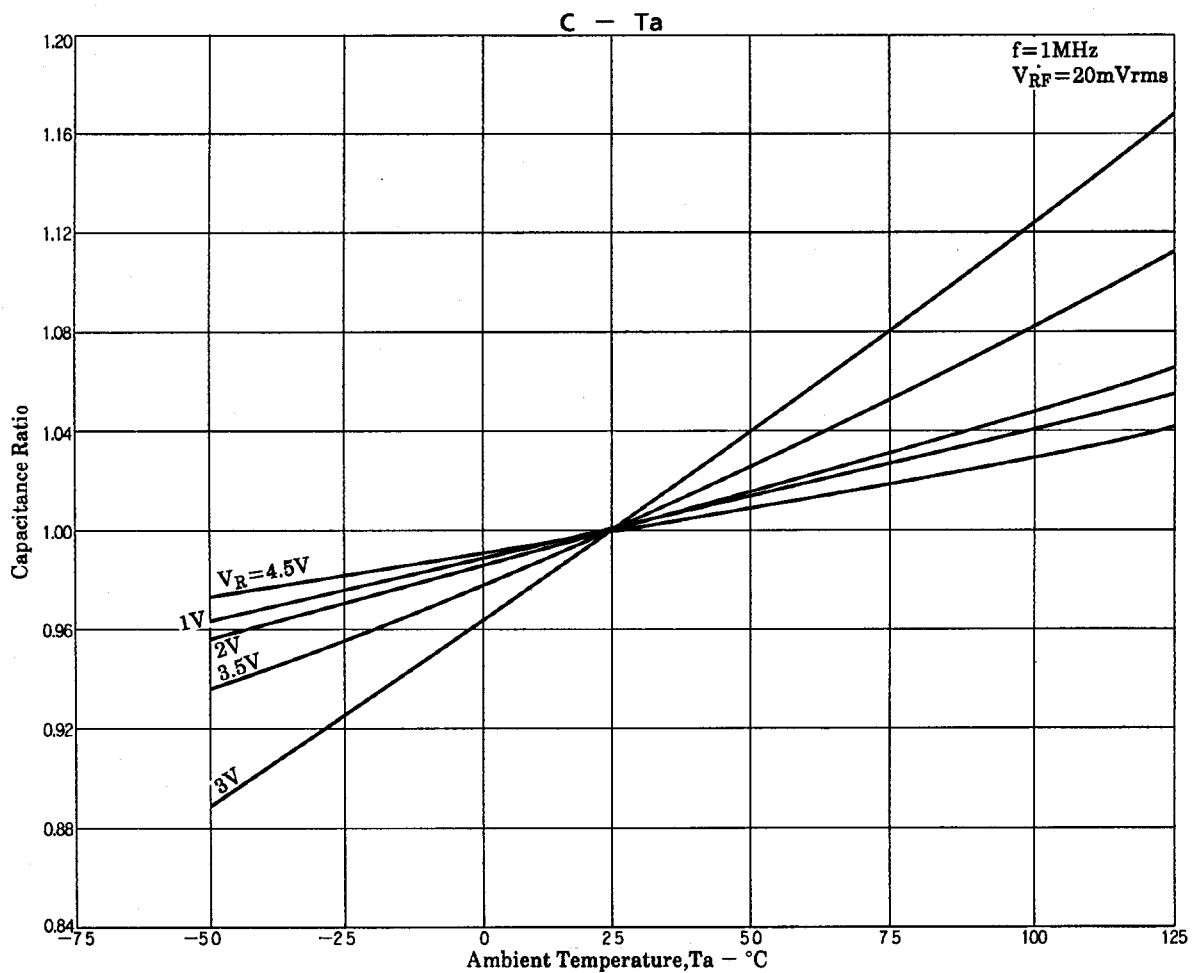
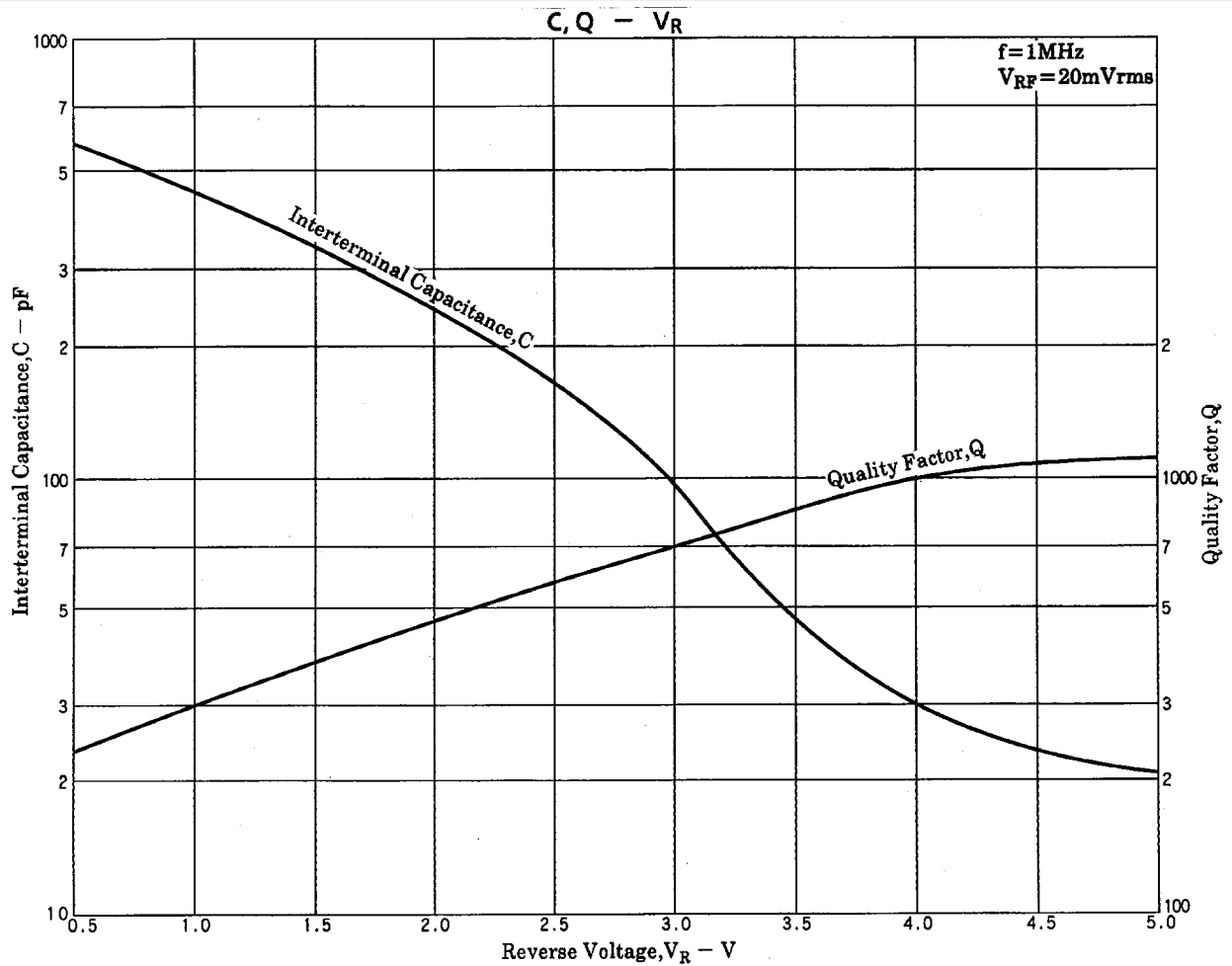
Note)\*2:1MHz signal:20mVrms

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**

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33098HA (KT)/D2095GI (KOTO)/AX-9028 No.5345-1/3

# SVC344



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