

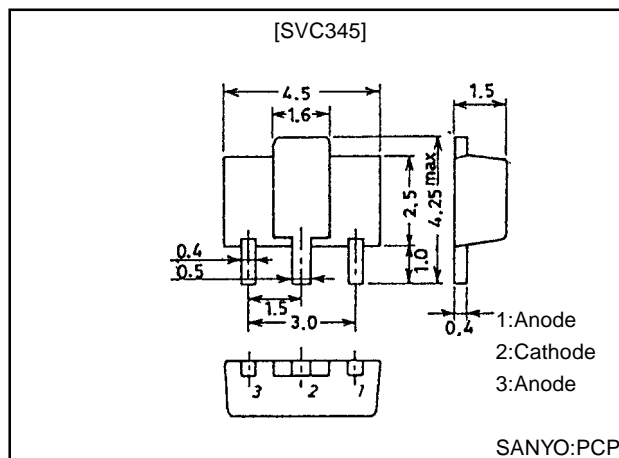
**SVC345**Silicon Diffused Junction Type
Varactor Diode**for AM Low-Voltage Electronic Tuning****Features**

- Twin type varactor diode for low-voltage AM electronic tuning applications.
- Low operating voltage ($\leq 6.5\text{V}$).
- High Q.
- Possible to offer the SVC345 devices in a tape reel packaging.
- Surface mount type.

Package Dimensions

unit:mm

1222A

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

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		33	V
Junction Temperature	T_J		125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 tp +125	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R = 10\mu\text{A}$	33			V
Reverse Current	I_R	$V_R = 20\text{V}$			100	nA
Interterminal Capacitance*1	$C_{1.0\text{V}}$	$V_R = 1.0\text{V}$, $f = 1\text{MHz} \times 2$	460.0*		540.0*	pF
	$C_{4.5\text{V}}$	$V_R = 4.5\text{V}$, $f = 1\text{MHz}$		64.0		pF
	$C_{6.5\text{V}}$	$V_R = 6.5\text{V}$, $f = 1\text{MHz}$	21.0		27.0	pF
Quality Factor	Q	$V_R = 1.0\text{V}$, $f = 1\text{MHz}$	200			
Capacitance Ratio	CR	$C_{1.0\text{V}}/C_{6.5\text{V}}$	17.5		24.5	
Matching Tolerance	ΔC_m	$(C_{\text{max}} - C_{\text{min}})/C_{\text{min}} \times 100$ (Between D1 to D2) $V_R = 1\text{V}$ to 6.5V			2.0	%

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

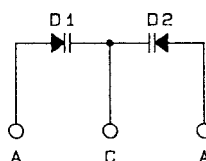
Note)*2: 1MHz signal: 20mVrms.

Note)*: The SVC345 are classified by $C_{1.0\text{V}}$ as follows:

Rank	$C_{1.0\text{V}}$ (pF)
R	460.0 to 491.0
S	482.0 to 515.0
T	505.0 to 540.0

· Marking: VB

Capacitance Rank: R, S, T

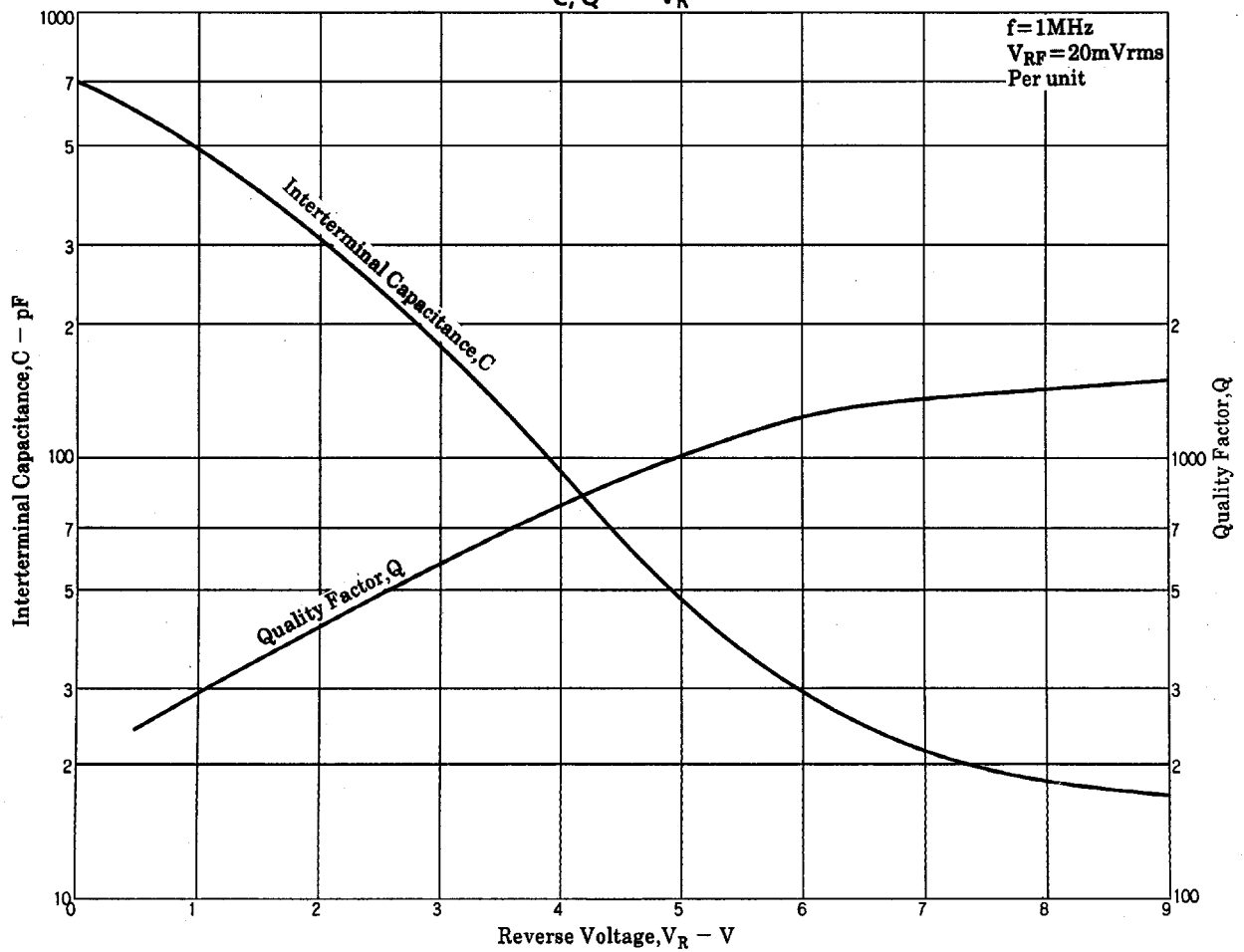
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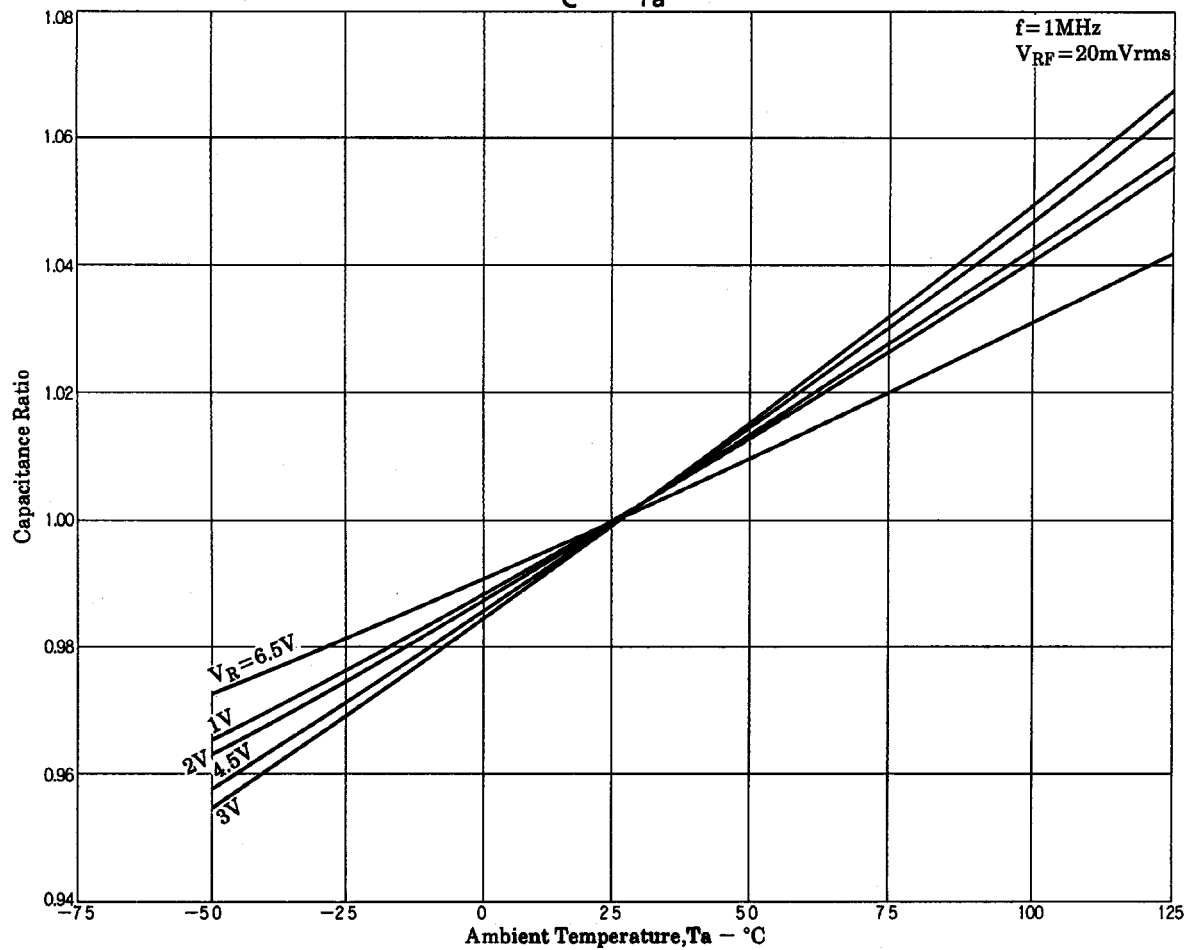
33098HA (KT)/D2095GI (KOTO)/AX-9029 No.5346-1/3

SVC345

C, Q - V_R



C - T_a



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