



SVC345

Silicon Diffused Junction Type
Varactor Diode

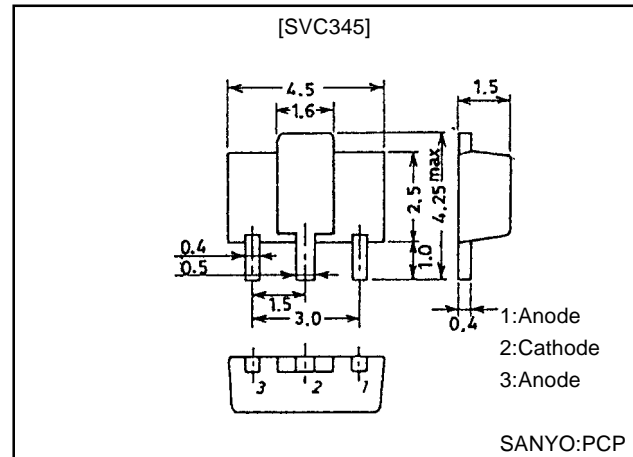
for AM Low-Voltage Electronic Tuning

Features

- Twin type varactor diode for low-voltage AM electronic tuning applications.
- Low operating voltage ($\leq 6.5V$).
- 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 $T_a = 25^\circ C$

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

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

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

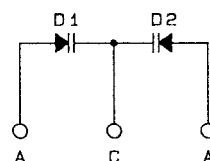
Note)*: The SVC345 are classified by $C_{1.0V}$ as follows:

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

· Marking: VB

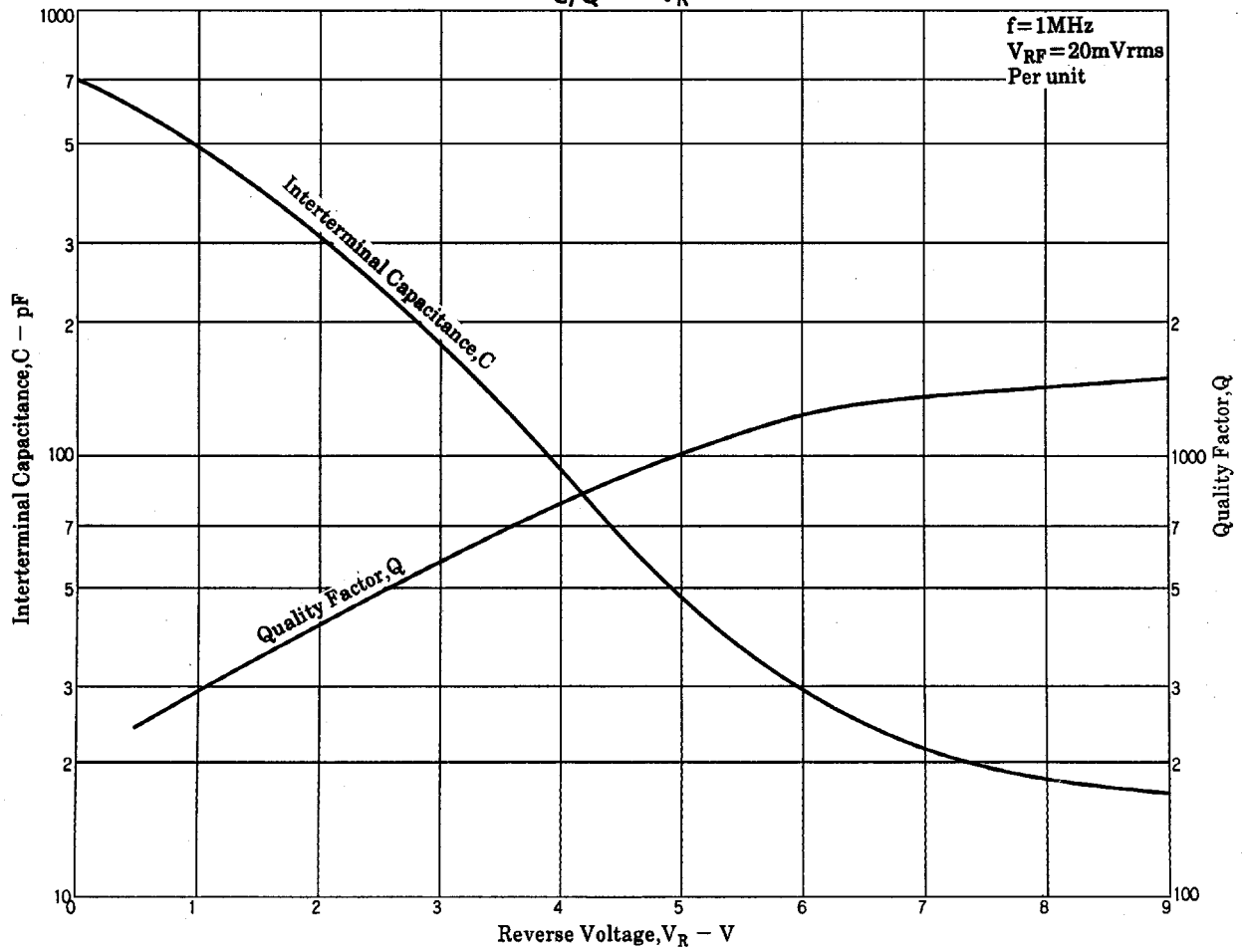
Capacitance Rank: R, S, T

Electrical Connection

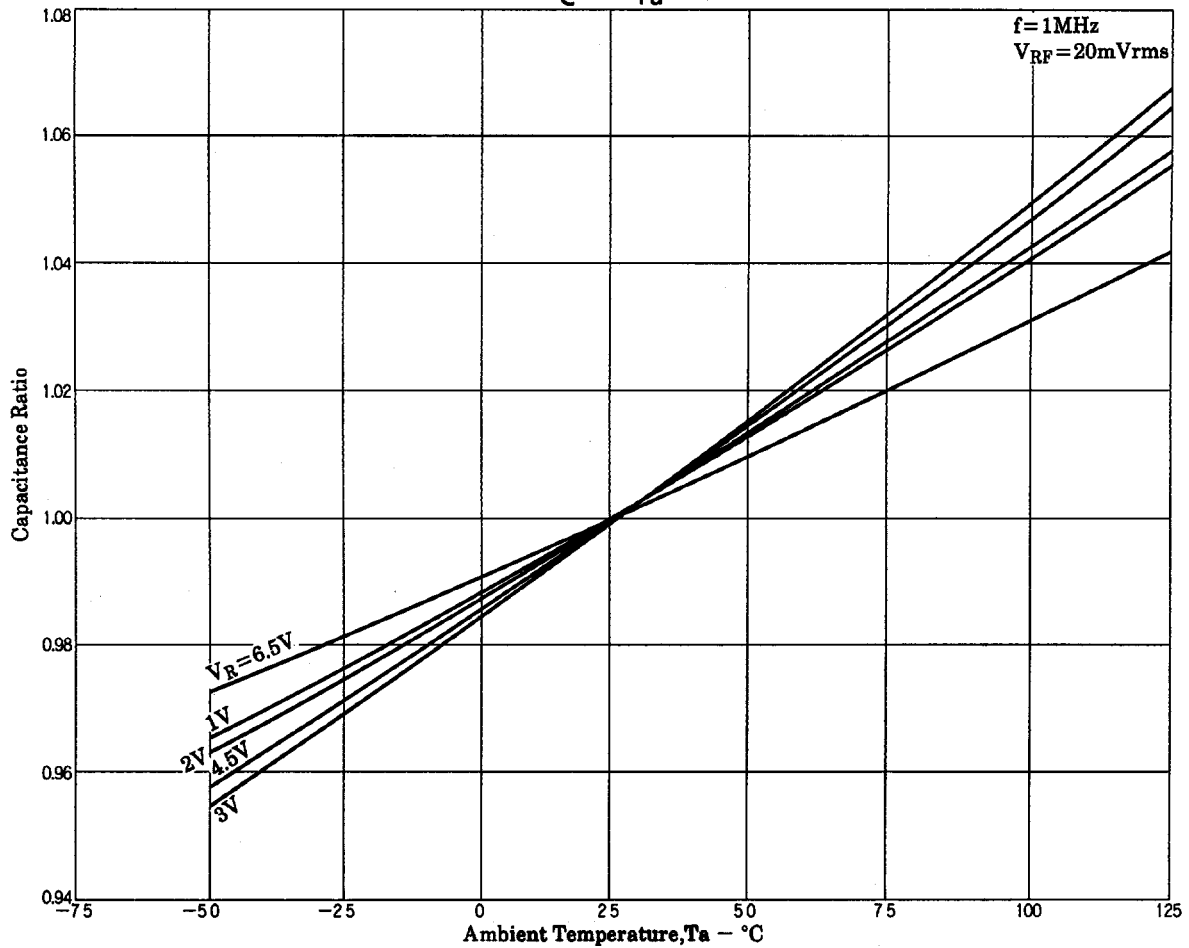


SVC345

C, Q - V_R



C - T_a



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