Ordering number :EN3757B

SVC352

Sillicon Diffused Junction Type

Composite Varactor Diode, for AM Low-Voltage Electronic Tuning

Features

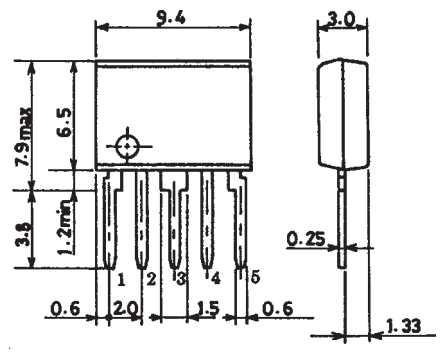
- Excellent matching characteristics because of composite type.
- The number of manufactuaring processes can be reduced and automatic mounting is possible because of composite type.
- High capacitance ratio and high quality factor.

Package Dimensions

unit:mm

1194A

[SVC352]



1:Anode1
2:Cathode
3:Anode2
4:Cathode
5:Anode3
SANYO:SIP5

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		16	V
Junction Temperature	Tj		125	˚C
Storage Temperature	Tstg		–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=10μA	16			V
Reverse Current (One diode)	I_R	V_R=9V			100	nA
Interterminal Capacitance (Average)	C_{1V}	V_R=1V, f=1MHz*1	460.0*		540.0*	pF
	C_{6V}	V_R=6V, f=1MHz		52.0		pF
	C_{8V}	V_R=8V, f=1MHz	21.0		27.0	pF
Quality Factor	Q	V_R=1V, f=1MHz	200			
Capacitance Ratio	CR	$C_{1.0V}/C_{8.0V}$, f=1MHz	17.5		24.5	
Matching Tolerance	ΔC_m*2	V_R=1V to 8V, f=1MHz			±2.5	%

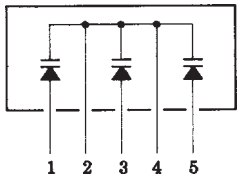
Note)*1:1MHz signal:20mVrms

Note)*2:$\Delta C_m = (C_{Dn} - C_{D3}) / C_{D3} \times 100$

Note)*:The SVC352 is classified by C_{1V} as follows:

Rank	C_{1V}	Rank Marking
R	460.0 to 491.0pF	Green
S	482.0 to 515.0pF	Black
T	505.0 to 540.0pF	Yellow

Electrical Connection



1:Anode1
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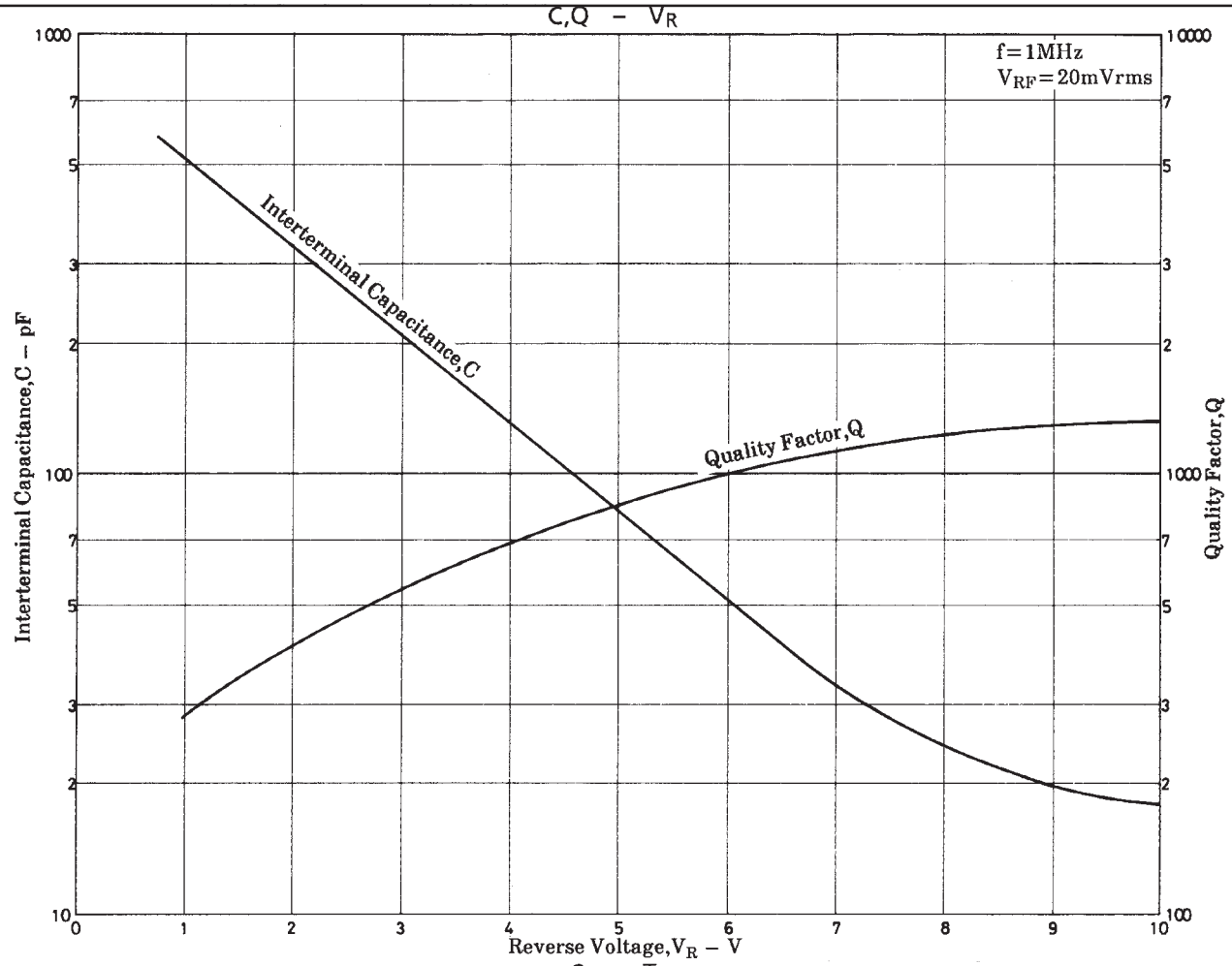
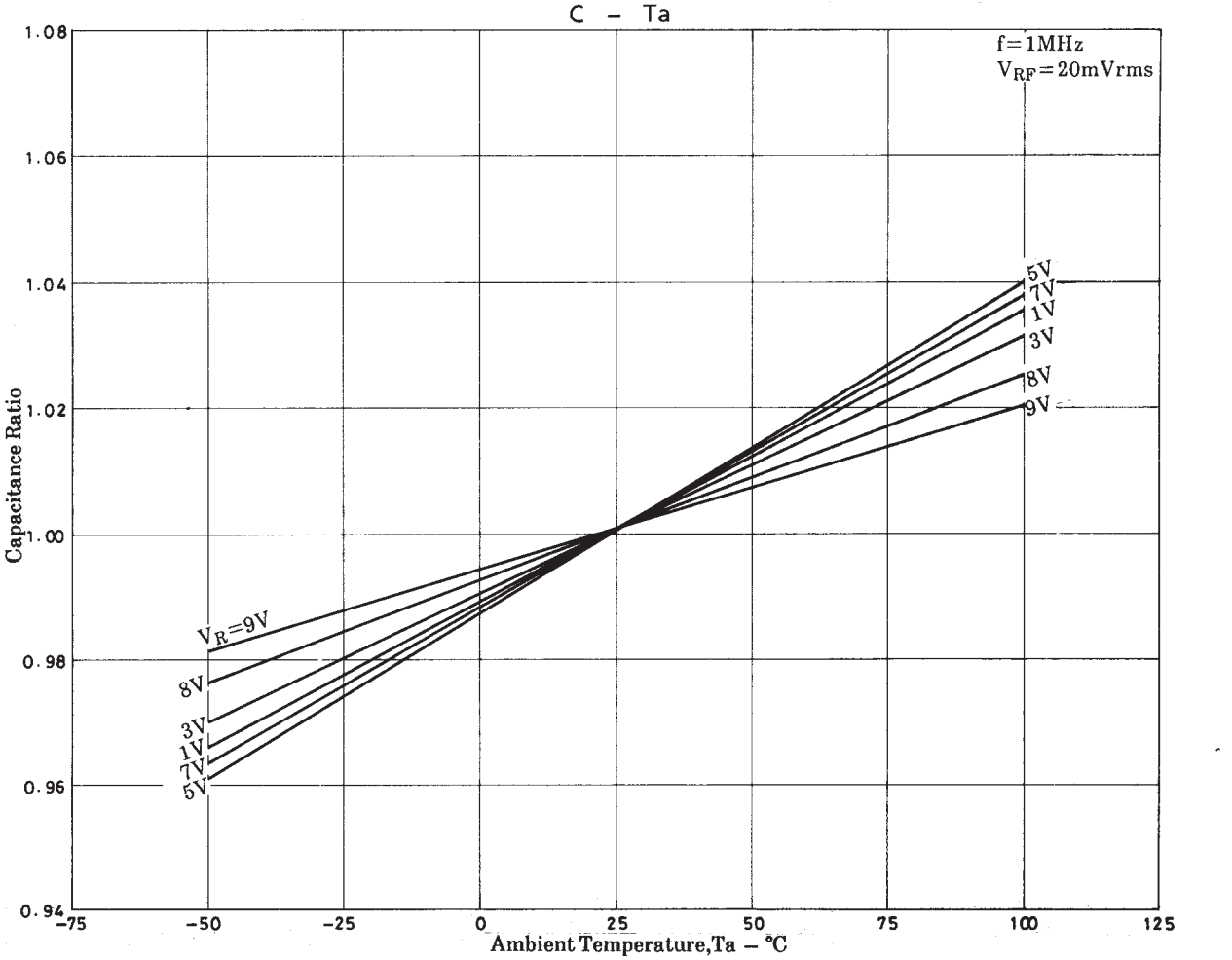
C,Q – V_R


f=1MHz
V_{RF}=20mVrms
Interterminal Capacitance,C
Quality Factor,Q
Interterminal Capacitance,C – pF
Quality Factor,Q
Reverse Voltage,V_R – V

C – Ta


f=1MHz
V_{RF}=20mVrms
5V
7V
1V
3V
8V
9V
V_R=9V
Capacitance Ratio
Ambient Temperature,Ta – °C