Ordering number :EN4629A

SVC252

Sillicon Diffused Junction Type

Varactor Diode for AFC, CB PLL

Features

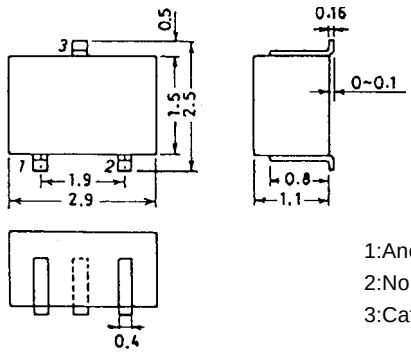
- The SVC252 is a varactor diode designed for use in AFC and CB PLL's VCO.
- High Q.
- High capacitance ratio.
- Compact packaging supports more compact and slimmer SVC252-applied set designs.

Package Dimensions

unit:mm

1148A

[SVC252]



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

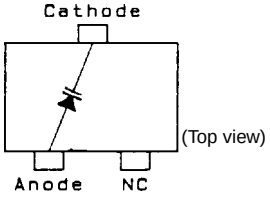
Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	I_R=10μA	16			V
Reverse Current	I_R	V_R=9V			10	nA
Interterminal Capacitance	$C_{1.6V}$	V_R=1.6V, f=1MHz*	23	31	38	pF
	$C_{5.0V}$	V_R=5.0V, f=1MHz	11	15	19	pF
Capacitance Ratio	CR	$C_{1.6V}/C_{5.0V}$	1.7	2.1	4.0	
Series Resistance	rs	f=50MHz, V_R=1V			0.6	Ω

Note)*:1MHz signal : 20m Vrms

· Marking : HV

Electrical Connection



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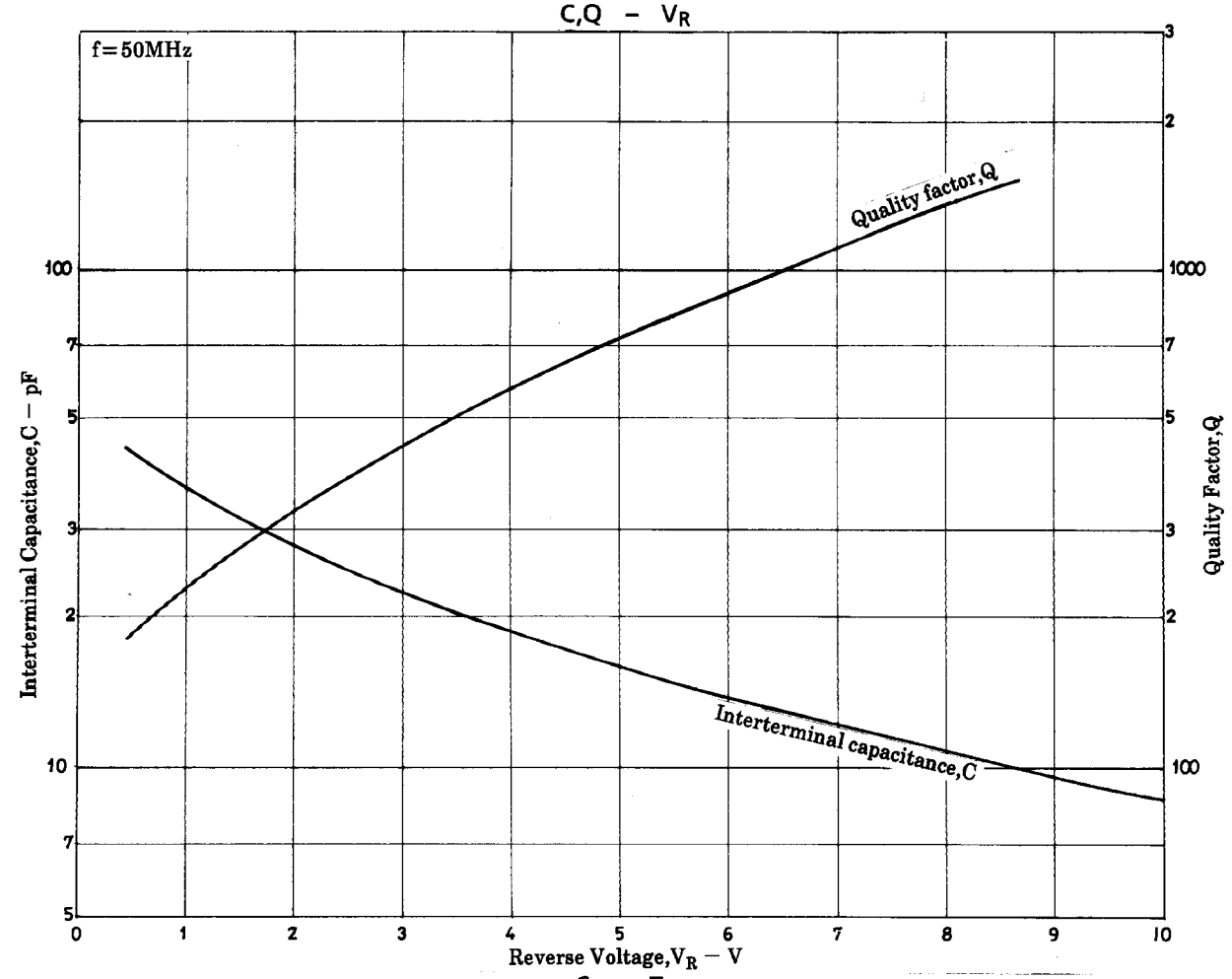
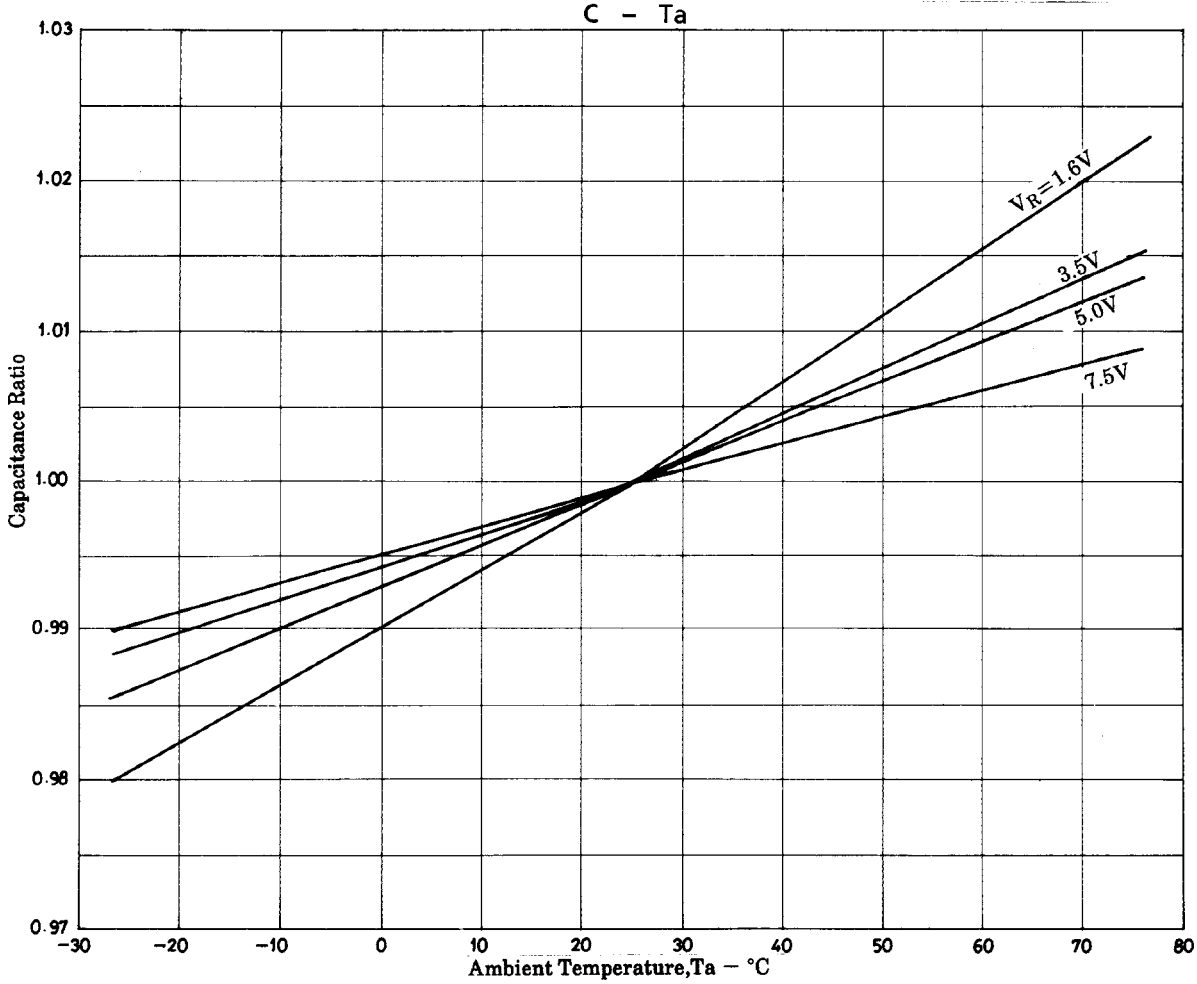
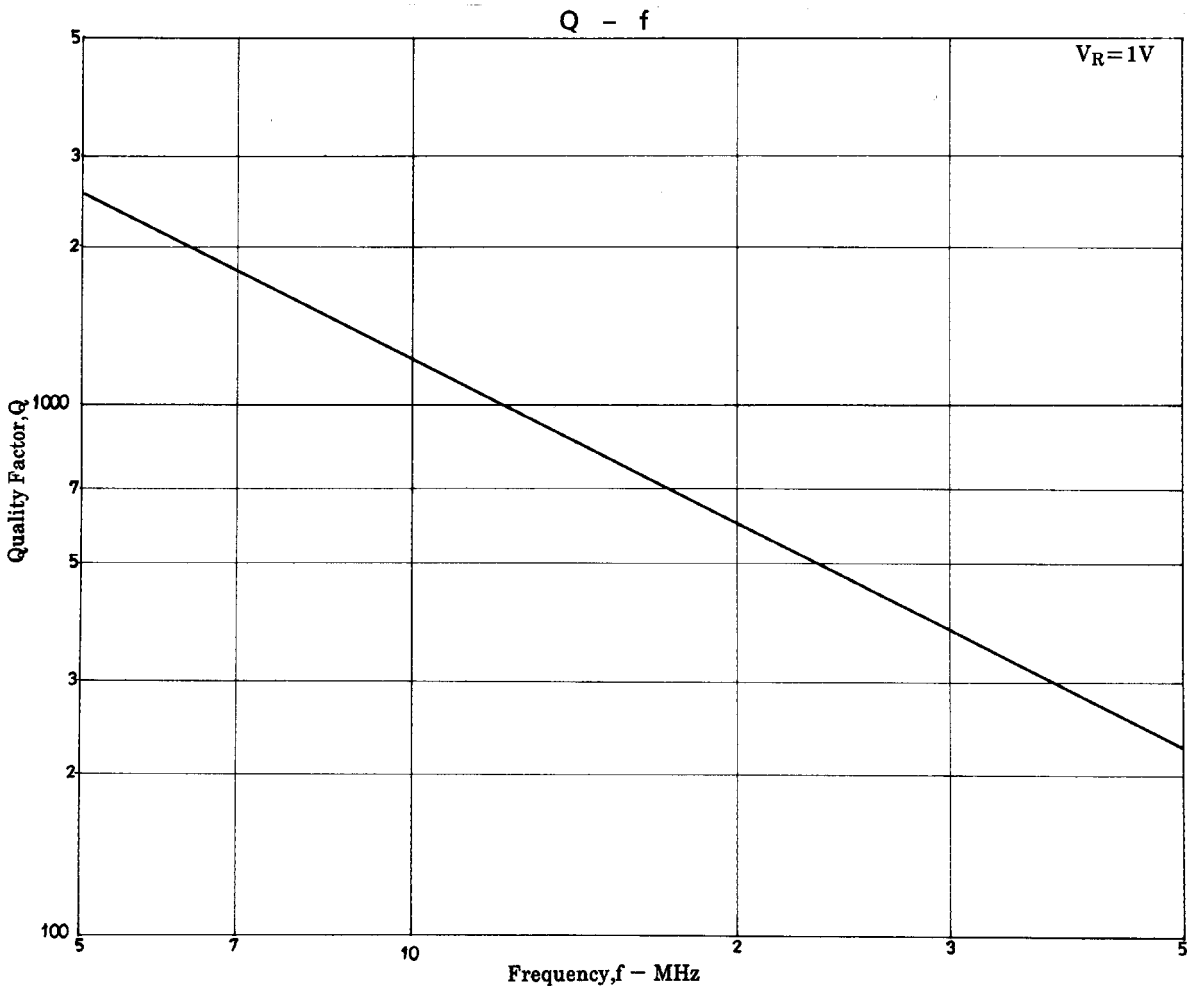
C,Q – V_R


f=50MHz
Quality factor,Q
Interterminal capacitance,C
Interterminal Capacitance,C – pF
Quality Factor,Q
Reverse Voltage,V_R – V
100
7
5
3
2
10
7
5
1000
7
5
3
2
100
0
1
2
3
4
5
6
7
8
9
10

C – Ta


V_R=1.6V
3.5V
5.0V
7.5V
Capacitance Ratio
Ambient Temperature,Ta – °C
1.03
1.02
1.01
1.00
0.99
0.98
0.97
−30
−20
−10
0
10
20
30
40
50
60
70
80



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