Ordering number :EN2617B

SVC342

Diffused Junction Type Sillicon Diode

Varactor Diode
for AM Receiver Electronic Tuning Use

Features

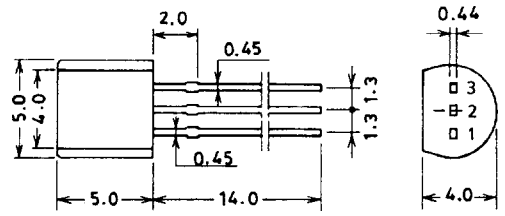
- Twin type varactor diode for low-voltage AM electronic tuning use.
- High capacitance ratio.
- Excellent linearity of C-V characteristic.
- High Q.

Package Dimensions

unit:mm

1074B

[SVC342]



JEDEC:TO-92
EIAJ:SC-43
SANYO:NP

1,3:Anode
2:Cathode

Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		16	V
Junction Temperature	Tj		100	˚C
Storage Temperature	Tstg		–55 to +100	˚C

Electrical Characteristics at Ta = 25˚C

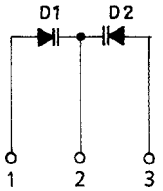
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)\ R}$	I_R=10μA	16			V
Reverse Current	I_R	V_R=9V			100	nA
Interterminal Capacitance*	C_{1V}	V_R=1V, f=1MHz	423.0		503.0	pF
	C_{6V}	V_R=6V, f=1MHz	46.0		61.0	pF
	C_{9V}	V_R=9V, f=1MHz	17.5		23.5	pF
Quality Factor	Q	V_R=1V, f=1MHz	200			
Capacitance Ratio	CR	C_{1V}/C_{9V}	19.5			
Matching Tolerance	ΔC_m	$(C_{max}–C_{min})/C_{min}$, (Between D1 to D2) V_R=1V to 9V			0.02	

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

Note)*:The SVC342 is classified by C_{1V} as follows:

Rank	C_{1V}(pF)
K	423.0 to 455.0
L	445.0 to 478.0
M	468.0 to 503.0

Electrical Connection



1,3:Anode
2:Cathode

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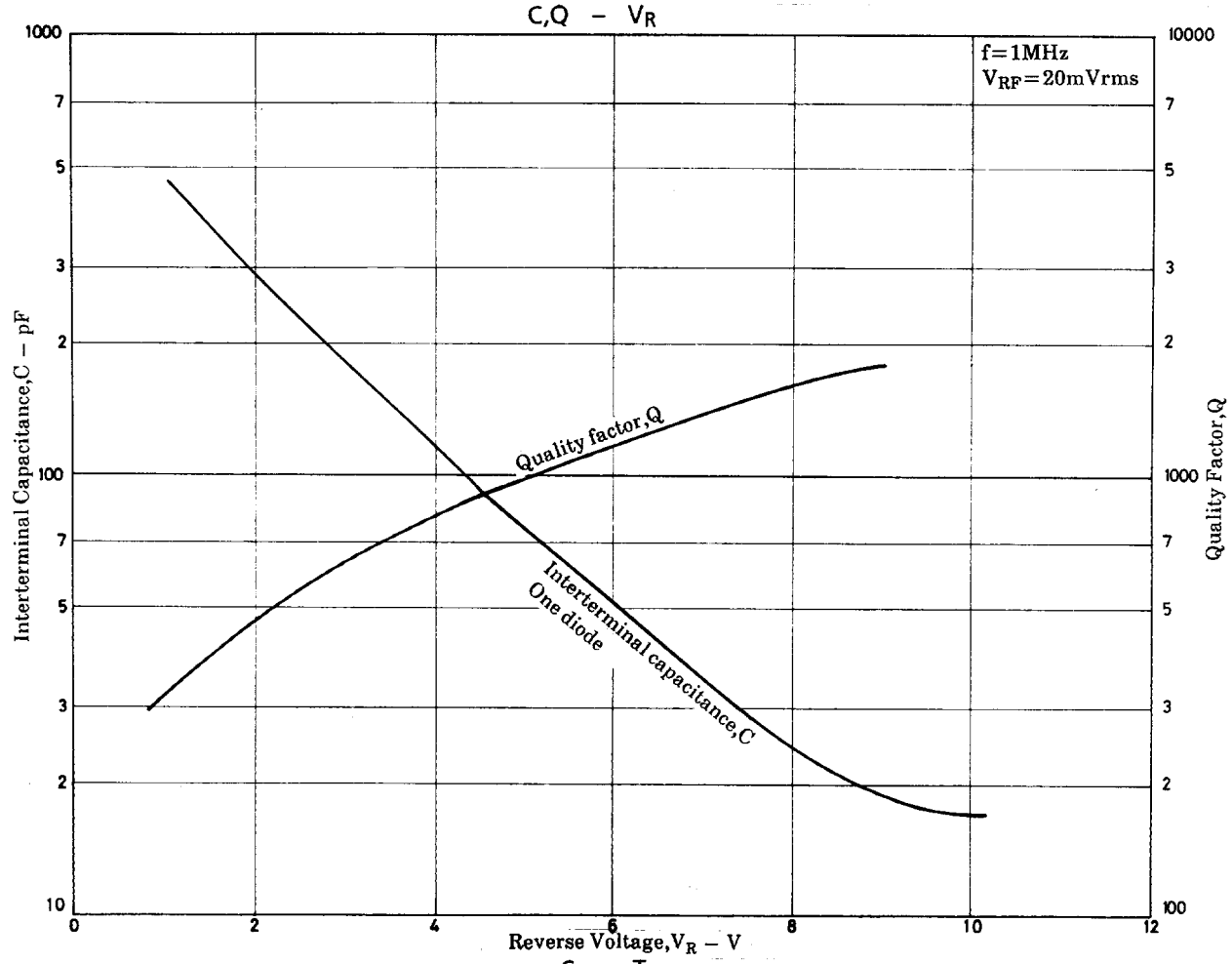
C,Q – V_R



C – Ta