Ordering number:EN2819D

SVC351

Diffused Junction Type Silicon Diode

Composite Varactor Diode for AM Receiver Electronic Tuning Use

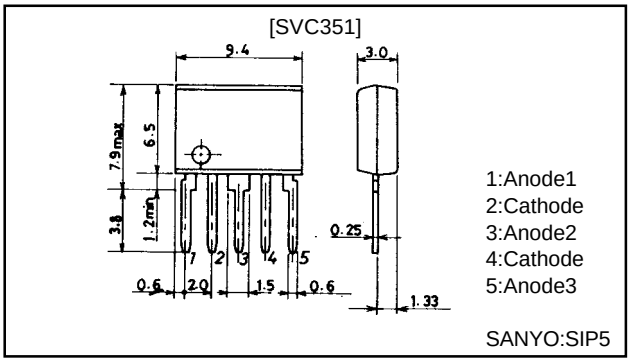
Features

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

Package Dimensions

unit:mm

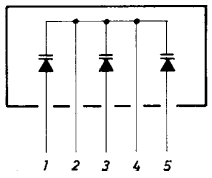
1194B



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

SANYO:SIP5

Electrical Connection



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	428.0*		500.0*	pF
	C_{6V}	V_R=6V, f=1MHz	48.0		65.0	pF
	C_{8V}	V_R=8V, f=1MHz	20.5		27.0	pF
Quality Factor	Q	V_R=1V, f=1MHz	200			
Capacitance Ratio	CR	C_{1V}/C_{8V}, f=1MHz	16.5		23.5	
Matching Tolerance	ΔCm*2	V_R=1 to 8V, f=1MHz			±2.5	%

*1 : 1MHz signal : 20 Vrms

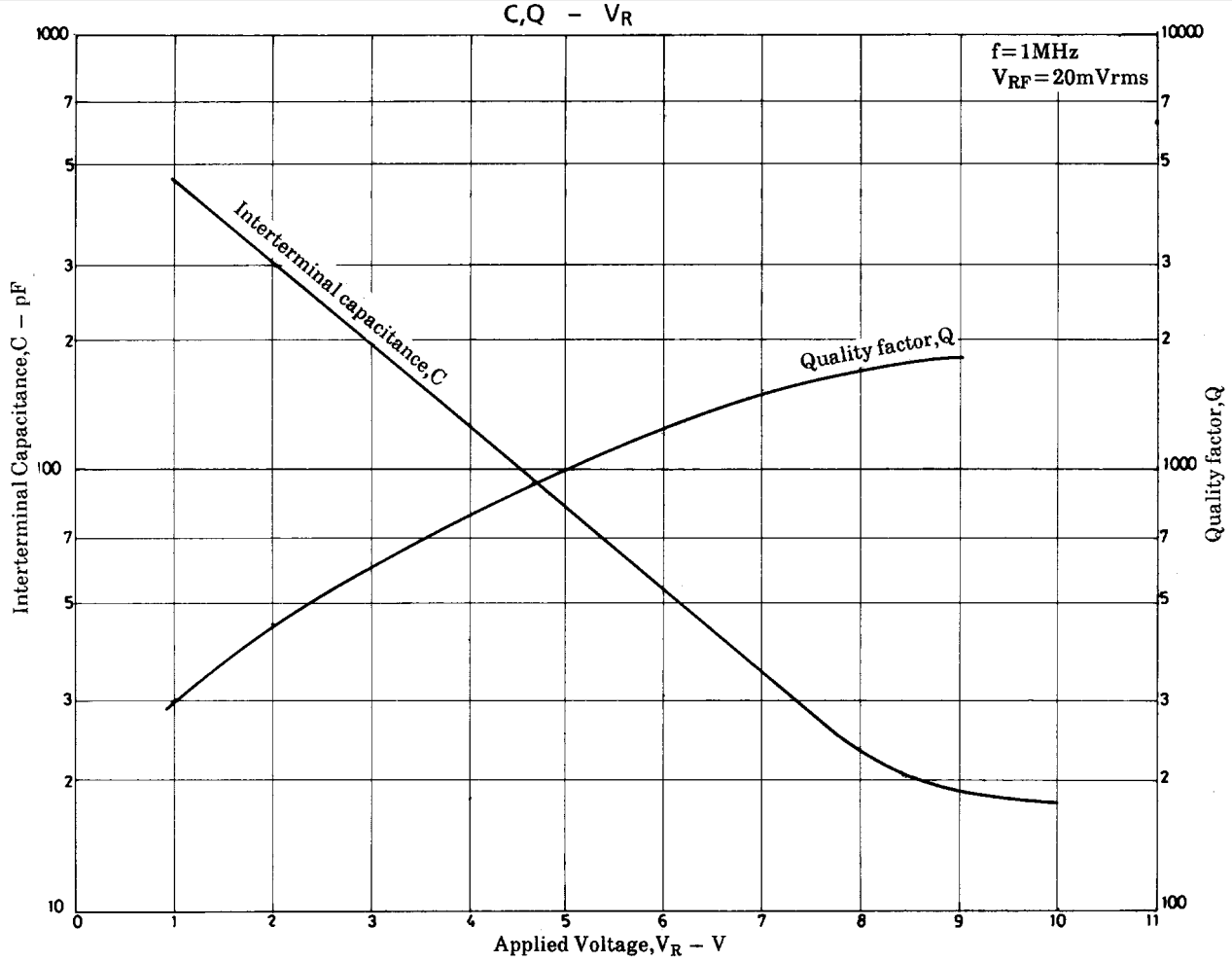
*2 : $\Delta Cm=(C_{Dn}-C_{D3})/C_{D3}\times 100$

* : The SVC 351 is classified by C_{1V} as follows:

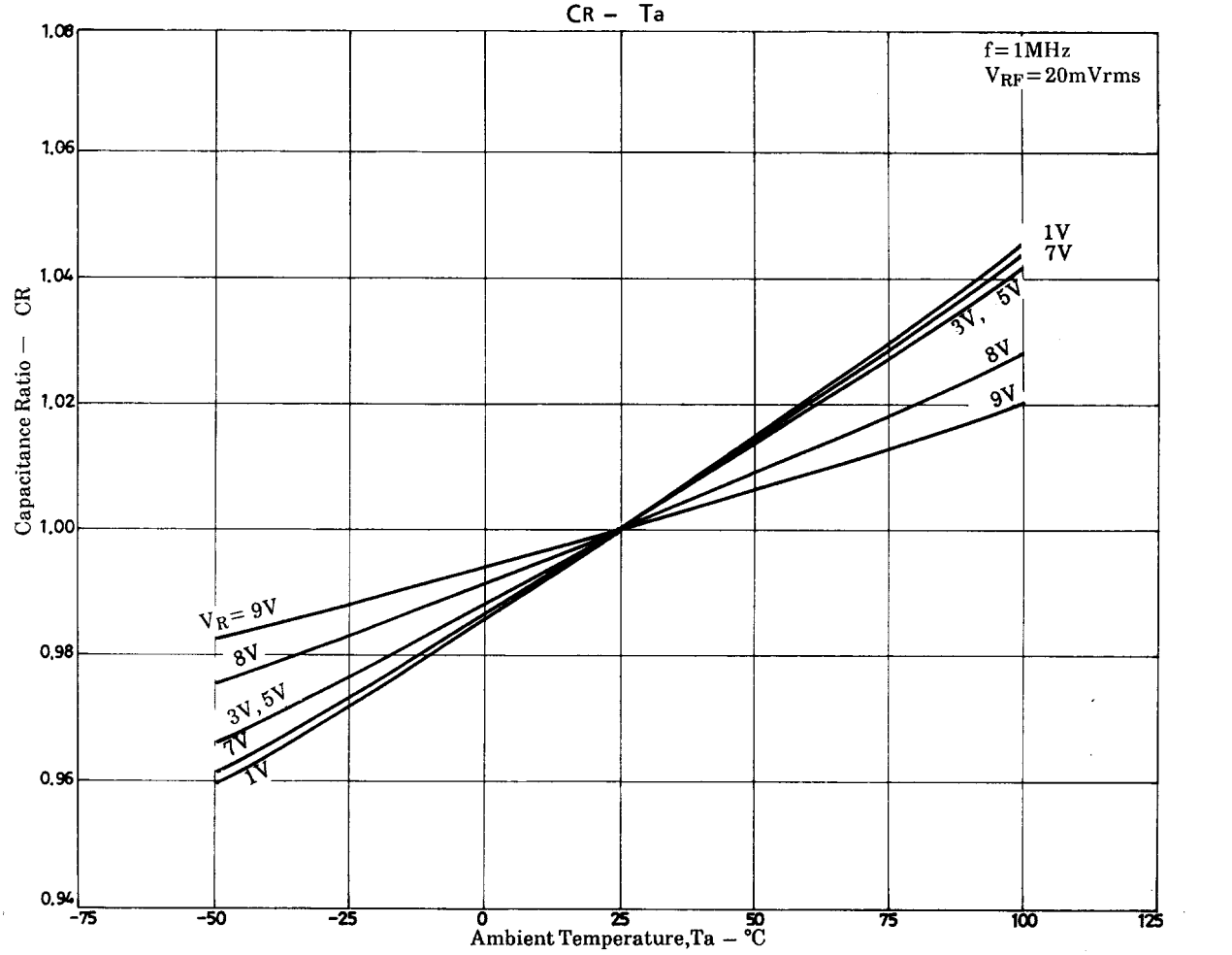
Rank	C_{1V}(pF)
K	428.0 to 456.5
L	447.5 to 478.0
M	468.5 to 500.0

SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquarters
TOKYO OFFICE, Tokyo Bldg., 1-10 , Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

C,Q – V_R


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

CR – Ta


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