



SVC323

Silicon Diffused Junction Type
Varactor Diode

for AM Low-Voltage Electronic Tuning

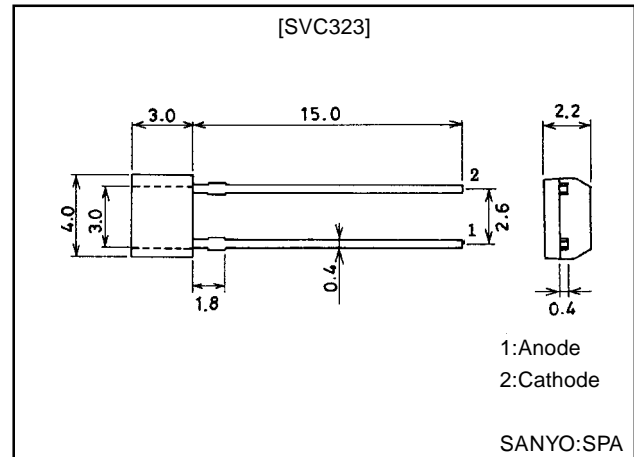
Features

- High capacitance ratio and high quality factor.
- AM 1710kHz max. supported.

Package Dimensions

unit:mm

1184A



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		16	V
Junction Temperature	T_J		125	°C
Storage Temperature	T_{stg}		-55 to +125	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	16			V
Reverse Current	I_R	$V_R=9V$			100	nA
Interterminal Capacitance	C_{1V}	$V_R=1V, f=1MHz^*1$	462.8		536.7	pF
	C_{6V}	$V_R=6V, f=1MHz$	45.72		59.72	pF
	C_{8V}	$V_R=8V, f=1MHz$	21.12		27.05	pF
Quality Factor	Q	$V_R=1V, f=100MHz$	200			
Capacitance Ratio	CR	$C_{1.0V}/C_{8.0V}, f=1MHz$	17.5		24.5	
Matching Tolerance	ΔC_m	$(C_{max}-C_{min})/C_{min} \times 100$			3.0	%

Note)*1:1MHz signal:20m Vrms

Note)*:The SVC323 is classified by $C_{1.0V}$ as follows:

Rank	$C_{1.0V}$
R	462.8 to 486.2pF
S	481.5 to 515.9pF
T	551.0 to 536.7pF

(Specify two ranks or more in principle.)

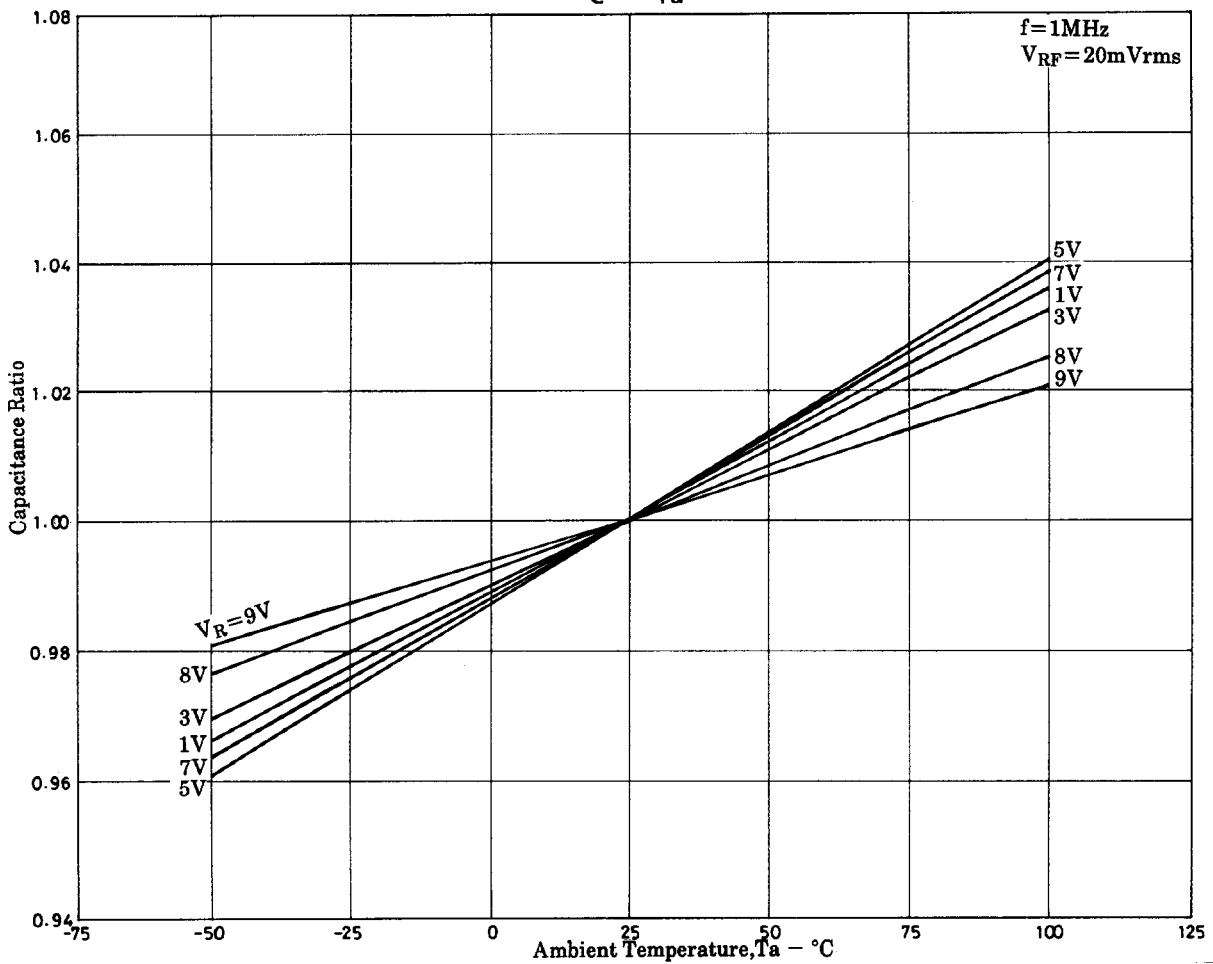
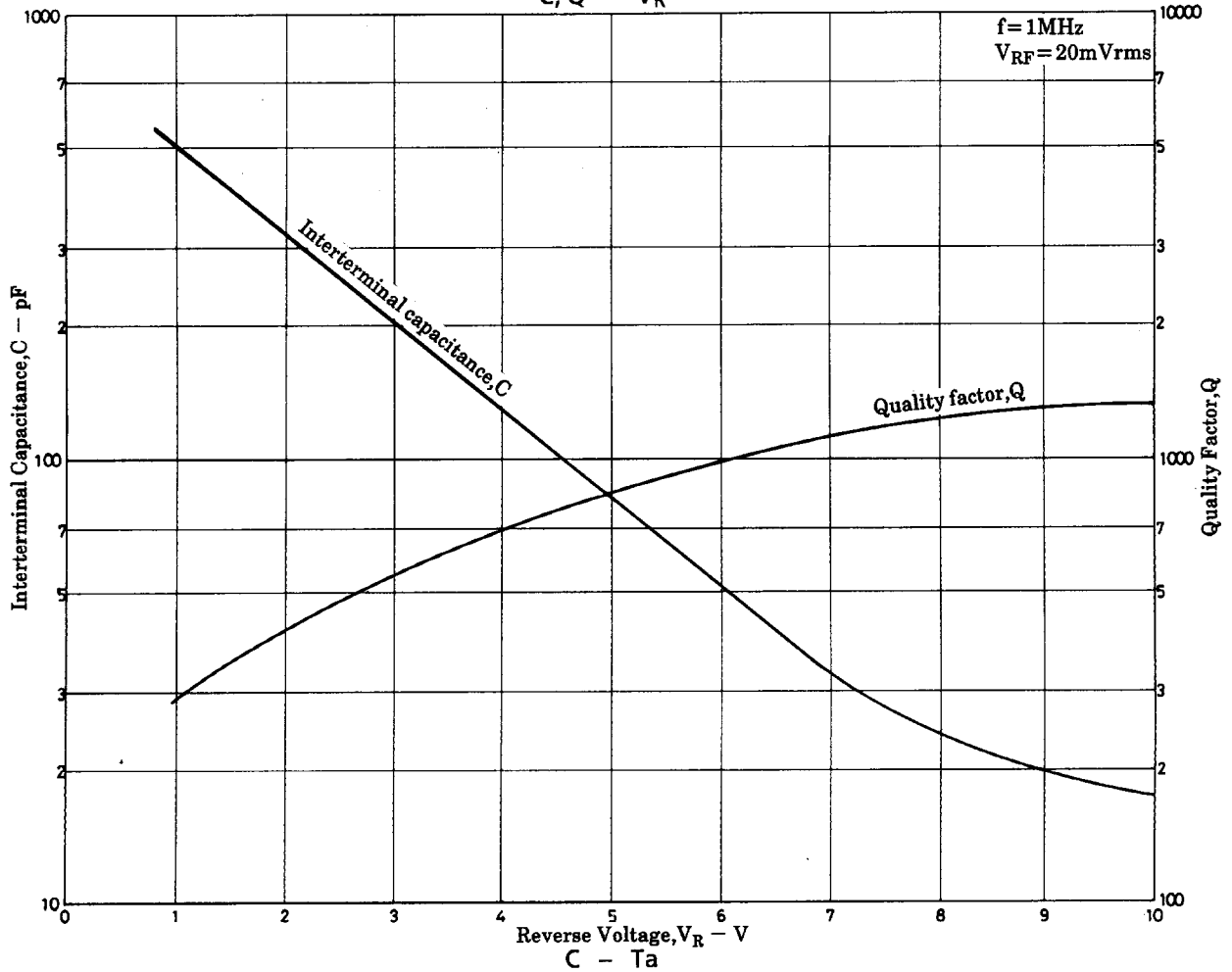
SVC323

Address and Capacitance Value

Test Point	C _{1.0V}		C _{6.0V}		C _{8.0V}	
	Address	Capacitance (pF)	Address	Capacitance (pF)	Address	Capacitance (pF)
Capacitance Value	204	(462.8 476.6	87	(45.72 47.09	48	(21.12 21.75
	205	(472.1 486.2	88	(46.63 48.03	49	(21.54 22.19
	206	(481.5 495.9	89	(47.57 48.99	50	(21.97 22.63
	207	(491.1 505.8	90	(48.52 49.97	51	(22.41 23.08
	208	(500.9 515.9	91	(49.49 50.97	52	(22.86 23.55
	209	(511.0 526.3	92	(50.48 51.99	53	(23.32 24.02
	210	(521.1 536.7	93	(51.49 53.03	54	(23.78 24.50
			94	(52.52 54.09	55	(24.26 24.99
			95	(53.57 55.17	56	(24.74 25.49
			96	(54.64 56.28	57	(25.24 26.00
			97	(55.73 57.40	58	(25.74 26.52
			98	(56.84 58.55	59	(26.26 27.05
			99	(57.98 59.72		

SVC323

C, Q - V_R



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of March, 1998. Specifications and information herein are subject to change without notice.