

SVC323

Silicon Diffused Junction Type
Varactor Diode
for AM Low-Voltage Electronic Tuning

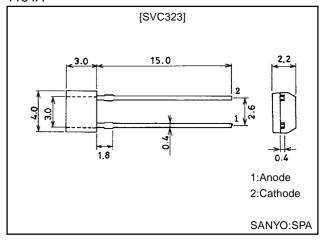
Features

- · 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	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit	
Farameter	Symbol	Conditions		min	typ	max	Offic
Breakdown Voltage	V _(BR) R	I _R =10μA		16			V
Reverse Current	IR	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} ×100				3.0	%

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

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

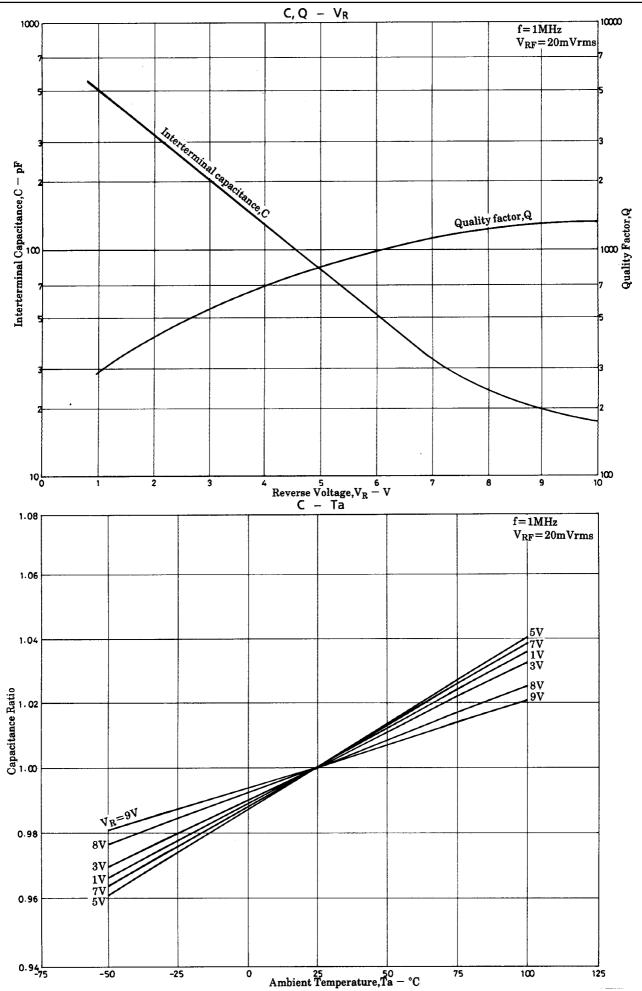
Rank	C _{1.0V}
R	462.8 to 486.2pF
S	481.5 to 515.9pF
Т	551.0 to 536.7pF

(Specify two ranks or more in principle.)

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Address and Capacitance Value

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



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