

VARIABLE-CAPACITANCE DIODES (IOCAP)

Low-voltage and high-voltage variable capacitance diodes are available for both of AM electronic tuning use and FM electronic tuning use.

Features

- *High capacitance ratio
- *Good linearity
- *Small-sized package
- *Single type and twin type available
- *High Q

$$\blacklozenge: \Delta C_m = \frac{C_{max} - C_{min}}{C_{min}} \times 100, \star: \Delta C_m = \frac{CD_n - CD_3}{CD_3} \times 100.$$

AM Electronic Tuning Use (Ta=25°C)

FM Electronic Tuning Use (Ta=25°C)

Type No. ():Marking	Package	Absolute Maximum Ratings V _R (V)	Electrical Characteristics		
			V _R (V)	C (PF) min max	ΔC _m max ◆ (%)
SVC321SPA	SPA	16	1.2 8	388.1~459.1 20.3~27.05	3
SVC323	SPA	16	1 8	462.8~536.7 21.12~27.05	3
SVC325(V2)	CPH3	16	1.2 8	388.1~459.1 20.3~27.05	-
SVC341(VA)	PCP	16	1 9	423~503 17.5~23.5	2
SVC342	NP	16	1 9	423~503 17.5~23.5	2
SVC343(VC) SVC344	PCP NP	30	1 4.5	410~445 21~26	2 2
SVC345(VB) SVC346	PCP NP	33	1 6.5	460~540 21~27	2
SVC347(V1) SVC348	CPH3 SPA	16	1 8	470~525 20~26	1.5 2
SVC353 SVC354	MFP6	16	1 8	460~540 21~27	★±2.5
SVC363 SVC364			1 8	428~500 20.5~27	★±2.5
SVC371	SOP8	16	1 8	460~540 19~26	2.5
SVC383(V3) SVC384	CPH3 SPA	33	1 6.5	482~540 21~27	2

Type No. ():Marking	Package	Absolute Maximum Ratings V _R (V)	Electrical Characteristics		
			V _R (V)	C (PF) min max	ΔC _m max ◆ (%)
SVC201SPA	SPA	16	1.6 7.5	28.19~37.45 10.17~12.99	5
SVC202SPA	SPA	16	1.6 7.5	28.19~37.45 10.17~12.99	5
SVC203SPA	SPA	16	3 8	36.92~43.03 12.64~16.84	3
SVC203CP(AV)	CP	16	1 9	58.8~65.98 10.84~13.4	6.5 11.8
SVC208(AV)	CP	16	3 8	36.92~43.03 12.77~16.84	3
SVC211SPA	SPA	32	3 25	37~42 14.8~18.2	-
SVC220(OV)	CP	16	2 8	44~46.5 25.1~28.2	3
SVC221(YV) SVC222	CP SPA	16	2 8	20.8~24.8 12.0~15.0	4
SVC231(RV)	CP	16	2 8	43.89~50.02 17.65~21.5	3
SVC232(RV)★	CP	16	2 8	43.89~50.02 17.65~21.5	-
SVC233(SV)	CP	16	1 4.5	62.02~68.79 21.45~28.27	3
SVC234(SV)★	CP	16	1 6.5	62.02~68.79 13.42~16.03	3
SVC241(VV)	CP	16	2 8	68.4~76.0 19.4~24.4	-
SVC245(VV)	CP	16	2 8	68.45~75.94 19.43~24.38	3
SVC253(NV)★ SVC224	CP SPA	16	1 9	51~76 9.5~15.5	-

Other Use

(FM, AFC, telephone, CB transceiver) (Ta=25°C)

SVC251SPA	SPA	12	1.6	23	~	38	rs 0.6Ω
SVC252(HV)	CP	16	5	11	~	19	

Pin Diodes (for VHF, UHF, AGC) (Ta=25°C)

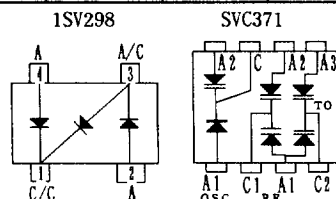
except PCP with C=0.7PF(Typ)

All products are with VR=50V, C=0.23PF(Typ.)

except CP(1SV272) with C=0.6PF(Typ)

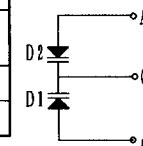
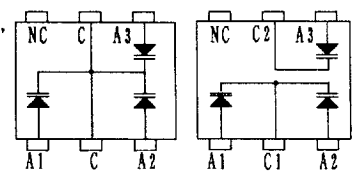
Type Nos. with a ★ sign are for AM band up-conversion.

Package	Connection type	r s (typ)				
		Conditions: IF=10mA, f=100MHz				IF=50mA, f=470MHz
		2.5 Ω	4.5	5 Ω	6	0.5 Ω
M C P	Single Series	1SV263(JV) 1SV264(KV)	1SV248(FV) 1SV249(GV)	1SV247(BV) 1SV246(CV)	1SV315(UV)	For antenna SW
C P	Single Series	1SV266(JV) 1SV267(KV)	1SV250(FV) 1SV251(GV)	1SV233(BV) 1SV234(CV)	1SV294(PV) 1SV316(UV)	1SV272(MV)
C P 4	Composed of three diodes.				1SV298(QV)	
C P 5	Parallel	1SV265(LV)	1SV241(EV)			
P C P	Single					1SV268(VD)



Electrical connection SVC353

SVC211, 202, 203CP, SVC203SPA, 208, 220, SVC231, 232, 233, SVC234, 241, 245, SVC341, 342, 343, SVC344, 345, 346, SVC347, 348, 383, SVC384.



NC: No Contact,
A: Anode, C: Cathode.

SVCs except for the products with electrical connection shown above are single type.