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

◆: $\Delta Cm=\frac{Cmax-Cmin}{Cmin}\times 100$, ★: $\Delta Cm=\frac{CDn-CD3}{CD3}\times 100$.

AM Electronic Tuning Use (Ta=25℃)

Type No. ( ):Marking	Package	Absolute Maximum Ratings $V_{R(V)}$	Electrical Characteristics $V_{R(V)}$	C (PF) min	C (PF) max	ΔCm 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	MFP6	16	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

FM Electronic Tuning Use (Ta=25℃)

Type No. ( ):Marking	Package	Absolute Maximum Ratings $V_{R(V)}$	Electrical Characteristics $V_{R(V)}$	C (PF) min	C (PF) max	ΔCm 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		-

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

Other Use

(FM, AFC, telephone, CB transceiver) (Ta=25℃)

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

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

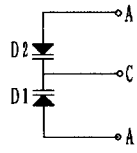
except PCP with C=0.7PF(Typ)

All products are with VR=50V, C=0.23PF(Typ.) except CP(1SV272) with C=0.6PF(Typ)

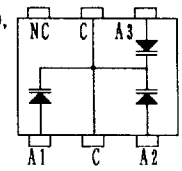
Package	Connection type	rs (typ) Conditions: IF=10mA, f=100MHz 2.5Ω	4.5	5Ω	6	IF=50mA, f=470MHz 0.5Ω For antenna SW
MCP	Single Series	1SV263(JV) 1SV264(KV)	1SV248(FV) 1SV249(GV)	1SV247(BV) 1SV246(CV)	1SV315(UV)	
CP	Single Series	1SV266(JV) 1SV267(KV)	1SV250(FV) 1SV251(GV)	1SV233(BV) 1SV234(CV)	1SV294(PV) 1SV316(UV)	1SV272(MV)
CP4	Composed of three diodes.				1SV298(QV)	
CP5	Parallel	1SV265(LV)		1SV241(EV)		
PCP	Single					1SV268(VD)

Electrical connection

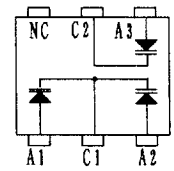
SVC211, 202, 203CP, SVC203SPA, 208, 220, SVC231, 232, 233, SVC234, 241, 245, SVC341, 342, 343, SVC344, 345, 346, SVC347, 348, 383, SVC384.



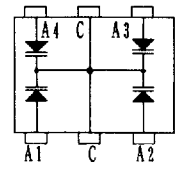
SVC353



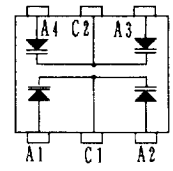
SVC354



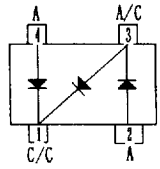
SVC363



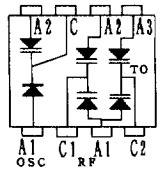
SVC364



1SV298



SVC371



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

SVCs except for the prducts with electrical connection hown above are single type.

These specifications are subject to change without notice.