Ordering number : EN5816

Silicon Diffused Junction Type

SVC347

Varactor Diode (IOCAP) for AM Receiver Electronic Tuning

Features

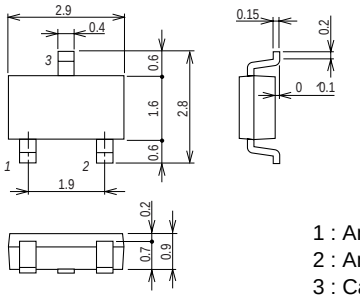
- Twin type varactor diode for AM electronic tuning use.
- Miniaturization and high-integration of tuner sets can be easily achieved due to the small package.
- High capacitance ratio and high quality factor.
- Provided in a tape reel packaging.
- Surface mount type.

Package Dimensions

unit: mm

1291

[SVC347]



1 : Anode
2 : Anode
3 : Cathode
SANYO: CPH3

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse voltege	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	C_{1V}	V_R=1V, f=1MHz *1	470*		535*	pF
(Capacitance value of	C_{6V}	V_R=6V, f=1MHz		55		pF
one diode)	C_{8V}	V_R=8V, f=1MHz	20		26	pF
Quality factor	Q	V_R=1V, f=1MHz	200			
Capacitance ratio	CR	C_{1V} / C_{8V}, f=1MHz	18.5			
Matching tolerance *2	ΔCm	(Cmax – Cmin) / Cmin×100				
		V_R=1V, f=1MHz			2.5	%
		V_R=6V, f=1MHz			3.0	%
		V_R=8V, f=1MHz			3.0	%

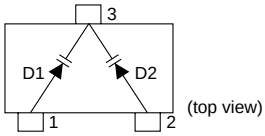
*1 : 1MHz signal : 20mVrms

*2 : Matching tolerance between D1 and D2

* : The SVC347 is classified bosed on C1V capacitance as shown in the table below :

Rank	C1V (pF)
S	470 to 505
T	495 to 535

Electrical Connection



(top view)

1:Anode
2:Anode
3:Cathode

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