Ordering number : ENN7761

SANYO Semiconductors
DATA SHEET

SVC381 — Diffused Junction Type Silicon Composite Varactor AM Low Voltage Electronic Tuning Applications

Features

- Twin type varactor diode for low-voltage AM electronic tuning use.
- Low voltage (4.5V).
- High Q.
- Possible to offer the SVC381 devices in a tape reel packaging.
- Surface mount type.
- Small-sized package permitting SVC381-applied sets to be compact and slim.

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
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	I_R=10μA	16			V
Reverse Current	I_R	V_R=9.0V			100	nA
Interterminal Capacitance *1	$C_{1.0V}$	V_R=1.0V, f=1MHz *2	410		445	pF
	$C_{3.0V}$	V_R=3.0V, f=1MHz	60		110	pF
	$C_{4.5V}$	V_R=4.5V, f=1MHz	21		26	pF
Quality Factor	Q	V_R=1.0V, f=1MHz	200			
Capacitance Ratio	C_R	$C_{1.0V}$ / $C_{4.5V}$	15			
Matching Tolerance *3	ΔCm1	V_R=1.0V, f=1MHz			2	%
	ΔCm2	V_R=3.0V, f=1MHz			3	%
	ΔCm3	V_R=4.5V, f=1MHz			3	%

*1 : The values of interterminal capacitance represent the average of measurements for two elements.

*2 : 1MHz signal : 20mVrms.

*3 : (Cmax−Cmin) / Cmin×100 Between D1 and D2.

Marking : V4

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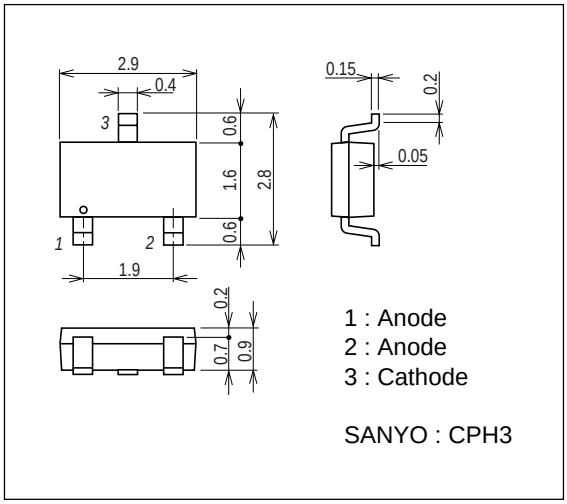
Package Dimensions

unit : mm

1291A



Electrical Connection