



SANYO Semiconductors

## DATA SHEET

# SVC385 — AM Low Voltage Electronic Tuning Applications

Diffused Junction Type Silicon Composite Varactor

## Features

- Twin type varactor diode for low-voltage AM electronic tuning use.
- Low voltage (5.5V).
- High Q.
- Possible to offer the SVC385 devices in a tape reel packaging.
- Surface mount type.
- Small-sized package permitting SVC385-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	$T_J$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	16			V
Reverse Current	$I_R$	$V_R=9V$			100	nA
Interterminal Capacitance *1	$C_{1V}$	$V_R=1V, f=1MHz *2$	339.0		381.0*	pF
	$C_{3.5V}$	$V_R=3.5V, f=1MHz$		65		pF
	$C_{5.5V}$	$V_R=5.5V, f=1MHz$	17.0		23.0	pF
Quality Factor	Q	$V_R=1V, f=1MHz$	200			
Capacitance Ratio	$C_R$	$C_{1V} / C_{5.5V}$	16.0			
Matching Tolerance	$\Delta C_m$	$(C_{max}-C_{min}) / C_{min} \times 100$ (Between D1 and D2) $V_R=1$ to 5.5V			2.0	%

Marking : V6

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

\*2 : 1MHz signal : 20mVrms.

\* : SVC385 are classified by  $C_{1V}$  as right :

Rank	$C_{1V}(pF)$
S	339 to 363
T	357 to 381

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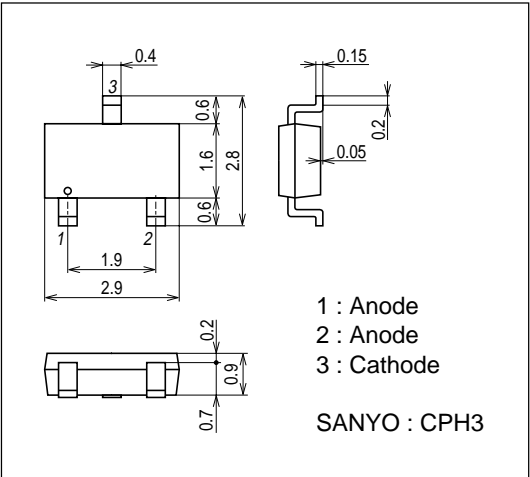
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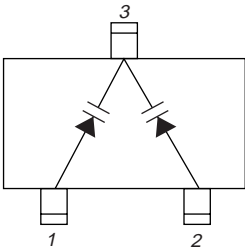
O1405VB MS IM TB-00001807 No.8995-1/3

Package Dimensions

unit : mm  
7015-002

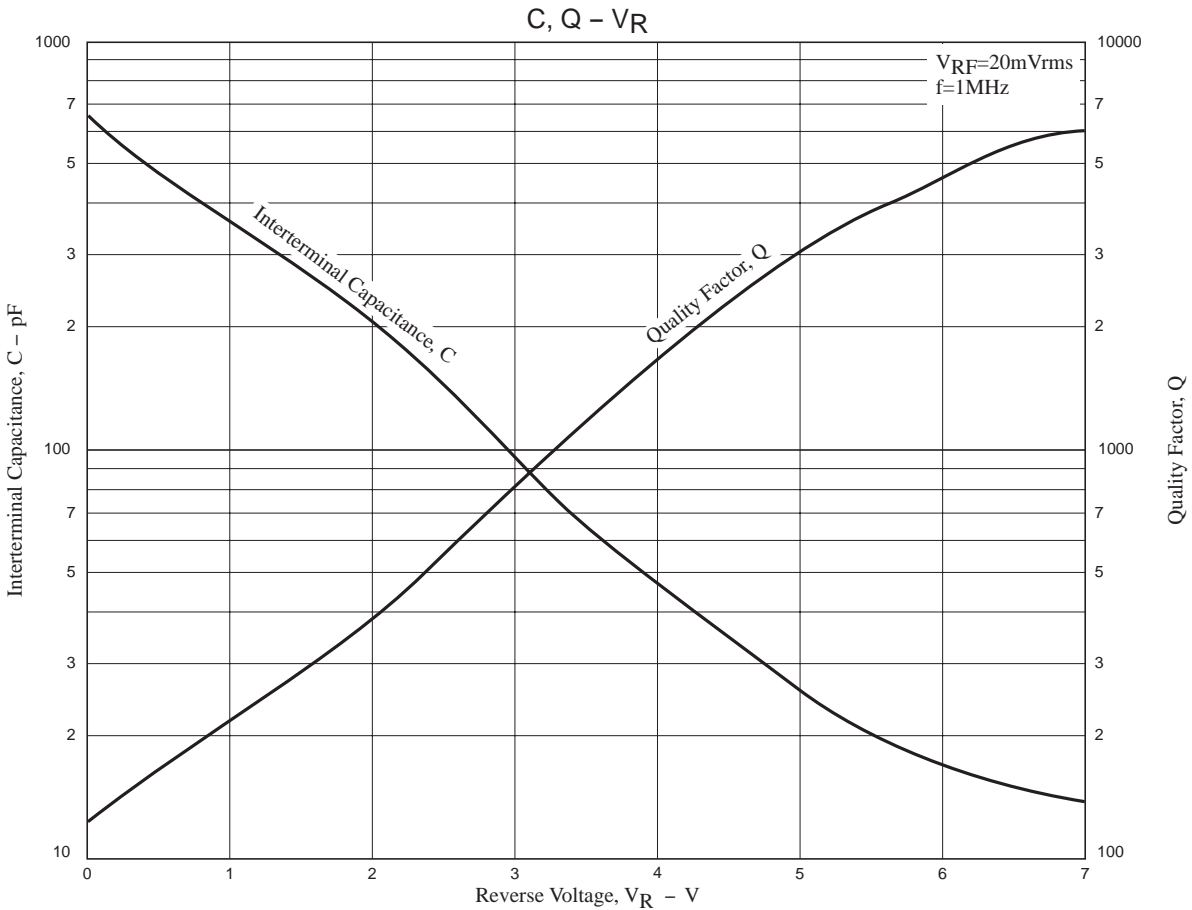


Electrical Connection

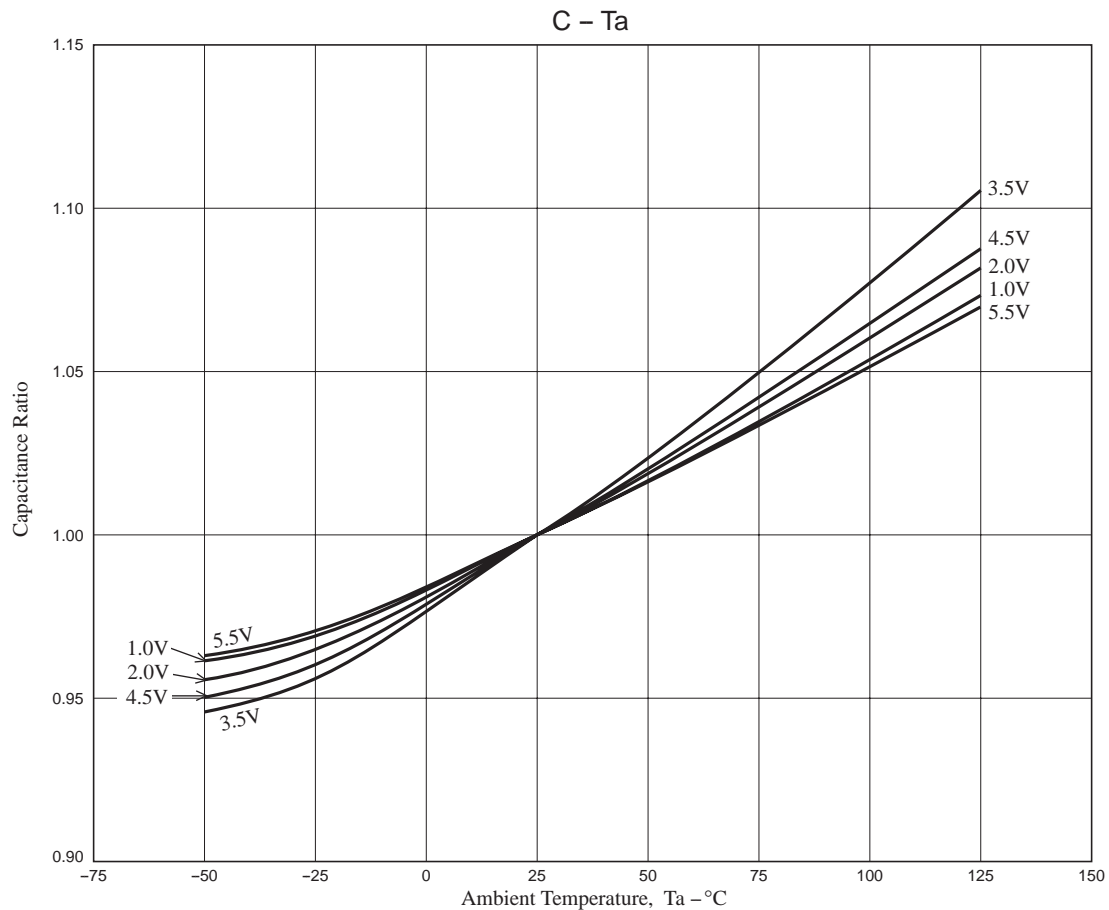


1 : Anode  
2 : Anode  
3 : Cathode

Top view



IT10049



IT10050

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