



SANYO Semiconductors

## DATA SHEET

# SVC389 — AM Low Voltage Electronic Tuning Applications

Hyper-Abrupt Junction Type Silicon Composite Varactor

## 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.

## 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 (One diode)	$I_R$	$V_R=9V$			100	nA
Interterminal Capacitance (Capacitance value of one diode)	$C_{1V}$	$V_R=1V, f=1MHz$ *1	470		525	pF
	$C_{6V}$	$V_R=6V, f=1MHz$		50		pF
	$C_{8V}$	$V_R=8V, f=1MHz$	18		24	pF
Quality Factor	$Q$	$V_R=1V, f=1MHz$	200			
Capacitance Ratio	$CR$	$C_{1V} / C_{8V}, f=1MHz$	19.5			
Matching Tolerance *2	$\Delta C_m$	$(C_{max}-C_{min}) / C_{min} \times 100$				
		$V_R=1V, f=1MHz$			1.5	%
		$V_R=6V, f=1MHz$			2.0	%
		$V_R=8V, f=1MHz$			2.0	%

Marking : V7

\*1 : 1MHz signal : 20mVrms

\*2 : Matching tolerance between D1 and D2

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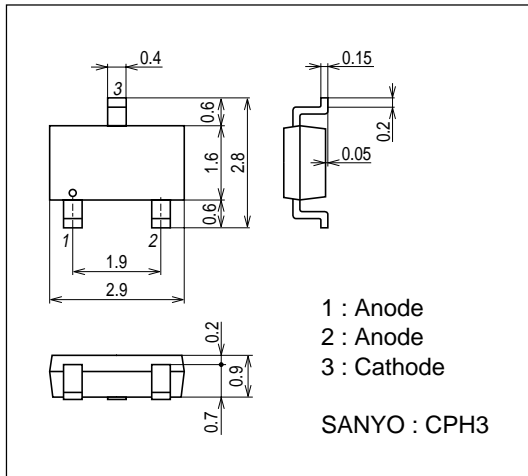
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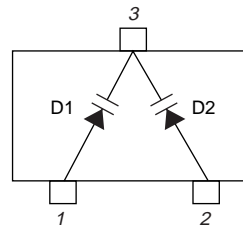
D0505VB MS IM TB-00001955 No. A0185-1/3

## Package Dimensions

unit : mm  
7015-002

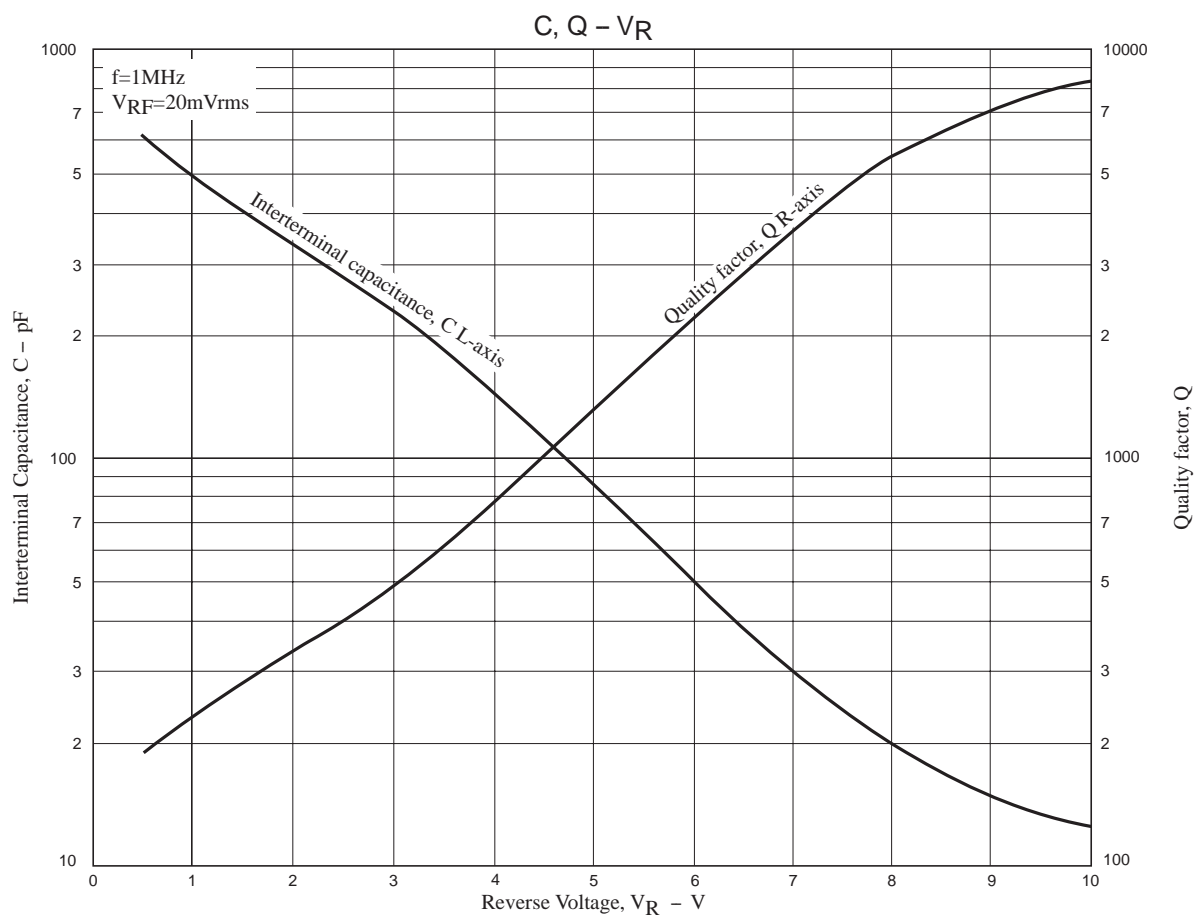


## Electrical Connection

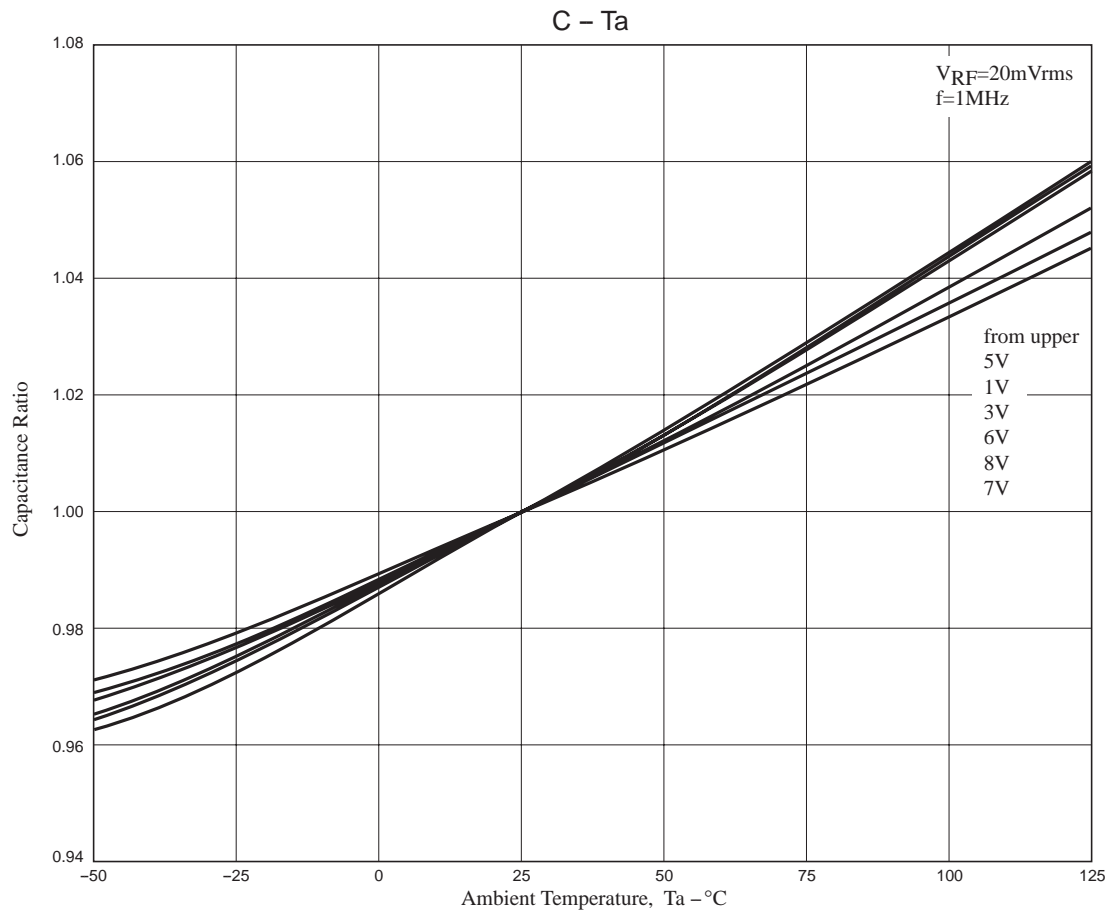


1 : Anode  
2 : Anode  
3 : Cathode

Top view



IT10402



IT08372

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