

# SANYO Semiconductors DATA SHEET

# SVC389 — AM Low Voltage Electronic Tuning Applications

#### **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	VR		16	V
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Onit
Breakdown Voltage	V(BR)R	I <sub>R</sub> =10μA	16			V
Reverse Current (One diode)	IR	V <sub>R</sub> =9V			100	nA
Interterminal Capacitance (Capacitance value of one diode)	C <sub>1V</sub>	V <sub>R</sub> =1V, f=1MHz *1	470		525	pF
	C <sub>6</sub> V	V <sub>R</sub> =6V, f=1MHz		50		pF
	C <sub>8V</sub>	V <sub>R</sub> =8V, f=1MHz	18		24	pF
Quality Factor	Q	V <sub>R</sub> =1V, f=1MHz	200			
Capacitance Ratio	CR	C <sub>1V</sub> / C <sub>8V</sub> , f=1MHz	19.5			
	ΔCm	(Cmax-Cmin) / CminX100				
Matching Toloronce *2		V <sub>R</sub> =1V, f=1MHz			1.5	%
Matching Tolerance *2		V <sub>R</sub> =6V, f=1MHz			2.0	%
		V <sub>R</sub> =8V, f=1MHz			2.0	%

Marking: V7

\*1 : 1MHz signal : 20mVrms

\*2 : Matching tolerance between D1 and D2

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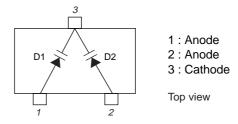
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TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

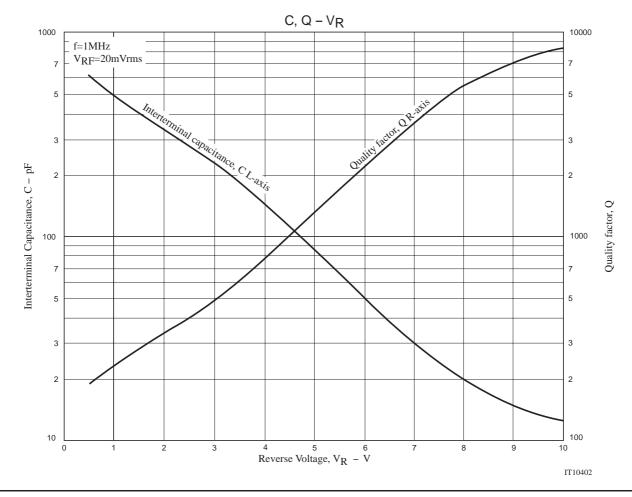
# **Package Dimensions**

unit : mm 7015-002

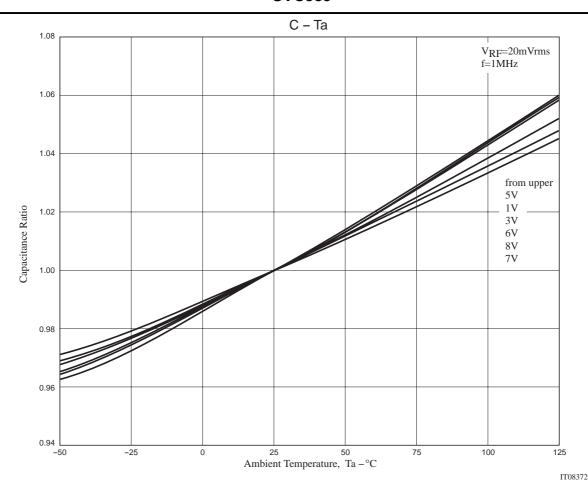
# 1 : Anode 2 : Anode 2 : Anode 3 : Cathode SANYO : CPH3

## **Electrical Connection**





### **SVC389**



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