**SVC383** 

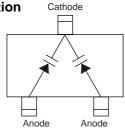


# **AM Low Voltage Electronic Tuning Applications**

### **Features**

- Twin type varactor diode for low-voltage AM electronic tuning use.
- · Low voltage (6.5V).
- · High Q.
- · Possible to offer the SVC383 devices in a tape reel packaging.
- · Surface mount type.
- · Small-sized package, permitting SVC383-applied sets to be compact and slim.

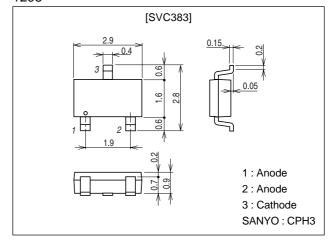
#### **Electrical Connection**



# **Package Dimensions**

unit:mm

1293



## **Specifications**

### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	٧ <sub>R</sub>		33	V
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

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

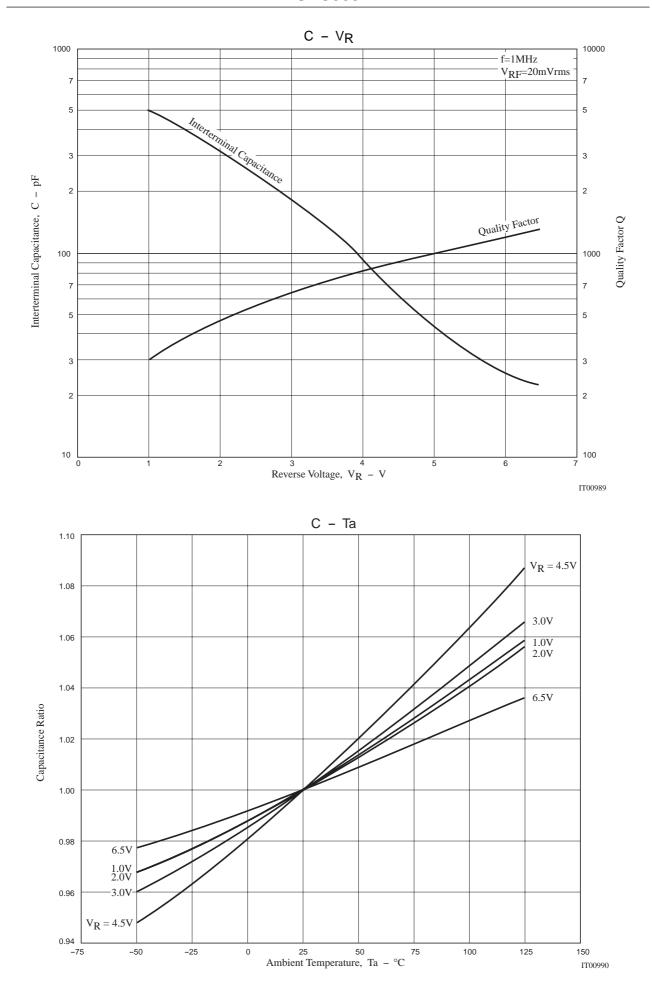
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =10μA	33			V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =20V			100	nA
Interterminal Capacitance *1	C <sub>1V</sub>	V <sub>R</sub> =1V, f=1MHz *2	482*		540*	pF
	C <sub>4.5V</sub>	V <sub>R</sub> =4.5V, f=1MHz		64		pF
	C <sub>6.5V</sub>	V <sub>R</sub> =6.5V, f=1MHz	21		27	pF
Quality Factor	Q	V <sub>R</sub> =1V, f=1MHz	200			
Capacitance Ratio	CR	C <sub>1V</sub> /C <sub>6.5V</sub>	17.5		24.5	
Matching Tolerance	ΔCm	(Cmax–Cmin)/Cmin ×100 (Between D1 and D2) V <sub>R</sub> =1V to 6.5V			2.0	%

- \*1: The values of interterminal capacitance represent the average of measurements for two elements.
- \*2: 1MHz signal: 20mVrms
- \*: SVC383 are classified by C<sub>1V</sub> as right:

Rank	C <sub>1V</sub> (pF)
S	482 to 515
Т	505 to 540

Marking: V3 Capacitance rank: S, T

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