

## SVC236 — Varactor Diode for FM Receiver Electronic Tuning Use

Diffused Junction Type Silicon Diode

### Features

- Low voltage (6.5V)
- Twin type varactor diode with good large-signal characteristics for FM receiver electronic tuning use
- Very small package permits SVC236-applied sets to be compact and slim
- Can be also provided in tape reel package and automatic insertion is supported
- High capacitance ratio ( $V_R=1.0$  to 6.5V)

### Specifications

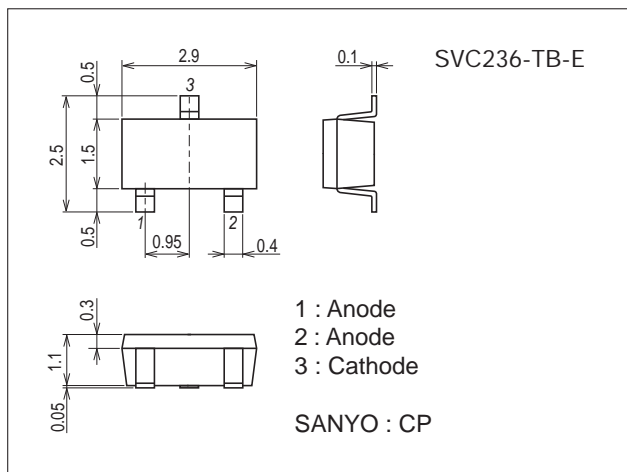
#### Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		16	V
Junction Temperature	$T_j$		125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

### Package Dimensions

unit : mm (typ)

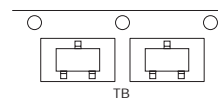
7013A-006



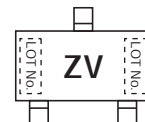
### Product & Package Information

- Package : CP
- JEITA, JEDEC : SC-59, TO-236, SOT-23, TO-236AB
- Minimum Packing Quantity : 3,000 pcs./reel

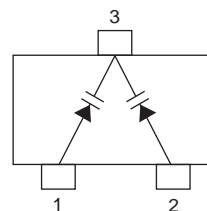
### Packing Type: TB



### Marking



### Electrical Connection



# SVC236

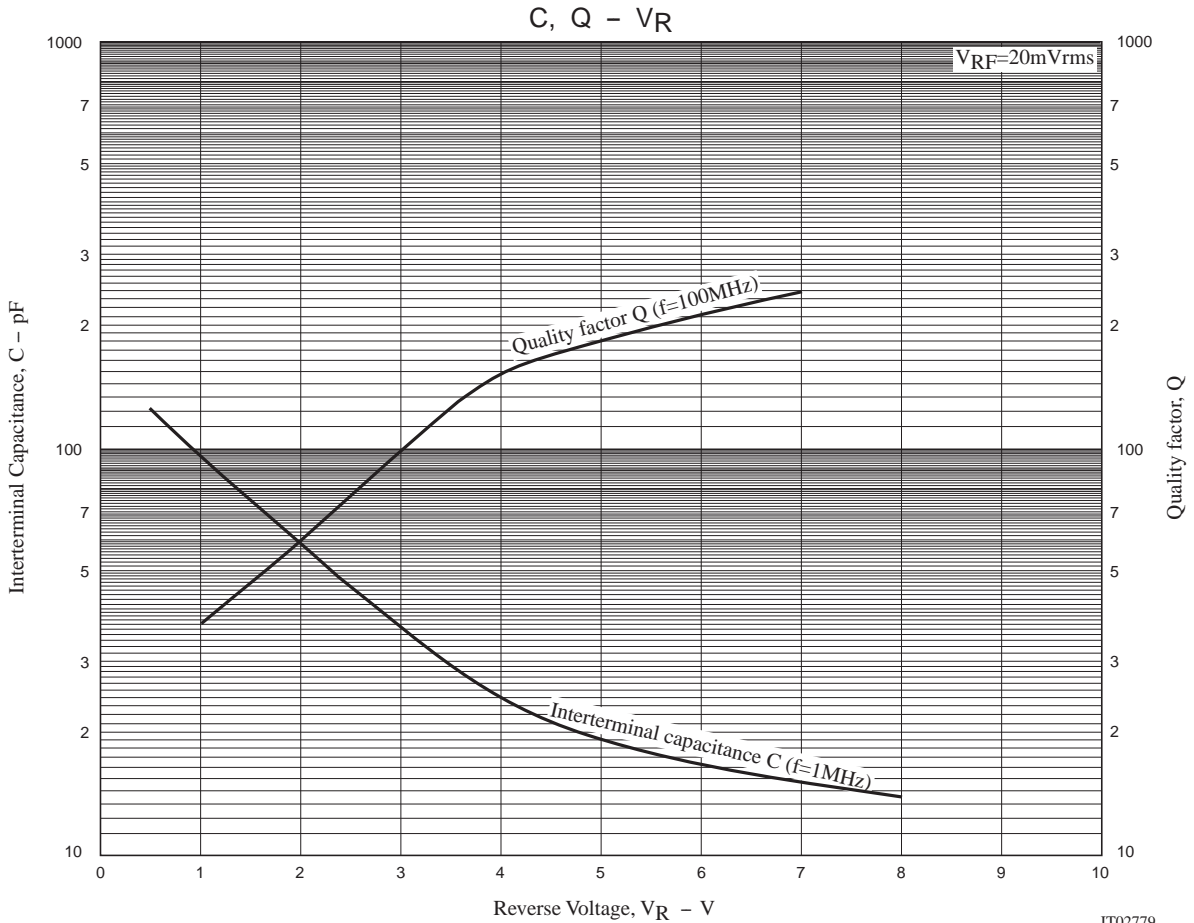
## Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	V(BR)R	I <sub>R</sub> =10μA	16			V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =10V			50	nA
Interterminal Capacitance *	C1V	V <sub>R</sub> =1.0V, f=1MHz *	92.07		102.12	pF
	C3.0V	V <sub>R</sub> =3.0V, f=1MHz	35.14		41.98	pF
	C6.5V	V <sub>R</sub> =6.5V, f=1MHz	14.44		16.84	pF
Quality Factor	Q	V <sub>R</sub> =3.0V, f=100MHz	70			
Capacitance Ratio	C <sub>R</sub>	C1.0V / C6.5V	5.0			
Matching Tolerance	ΔC <sub>m</sub>	V <sub>R</sub> =1.0V, 3.0, 6.5, f=1MHz, (C <sub>max</sub> ×C <sub>min</sub> ) / C <sub>min</sub> ×100			3.0	%

Note) \* : Capacitance value per each diode. \* : 1MHz signal : 20mVrms

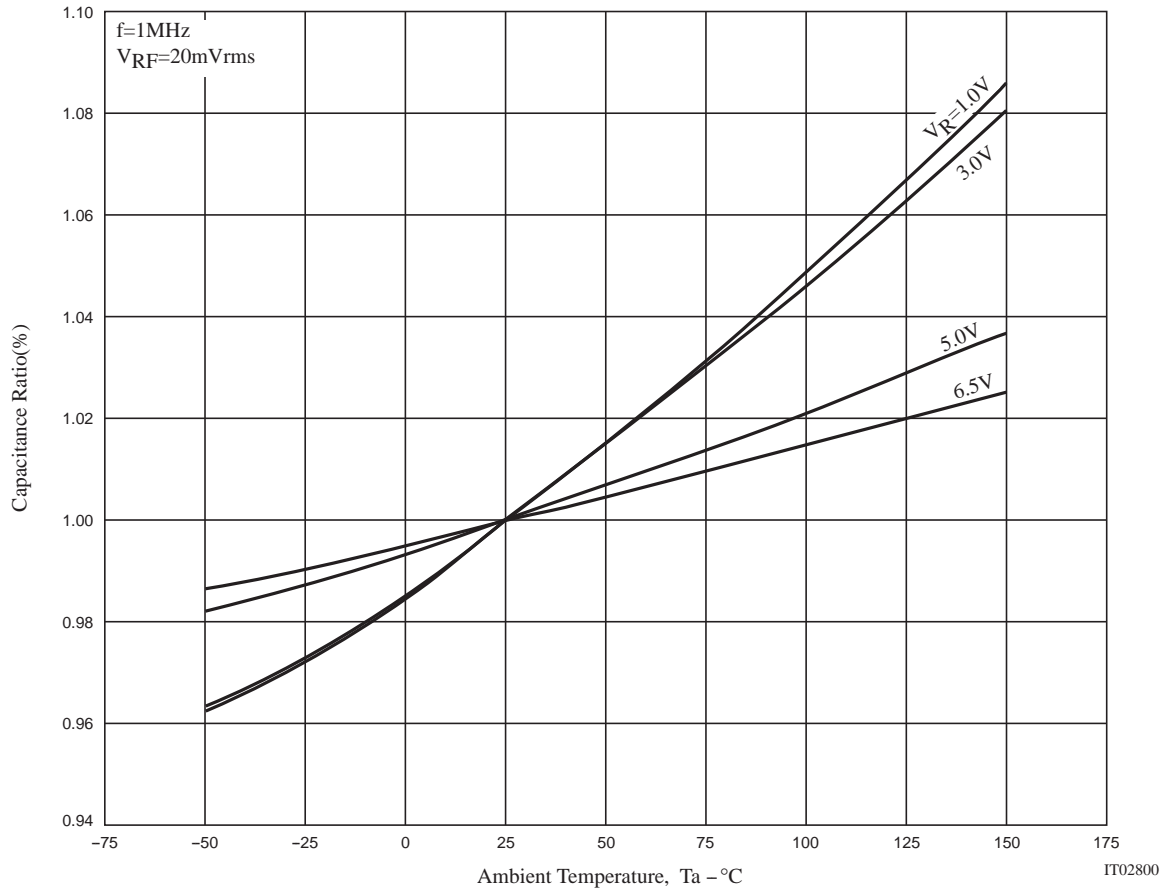
## Ordering Information

Device	Package	Shipping	memo
SVC236-TB-E	CP	3,000pcs./reel	Pb Free



# SVC236

C - Ta



IT02800

Taping Specification

SVC236-TB-E

1. Packing Format

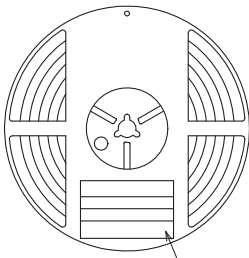
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CP	CP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Reel label, Inner box label  
(unit:mm)

Outer box label

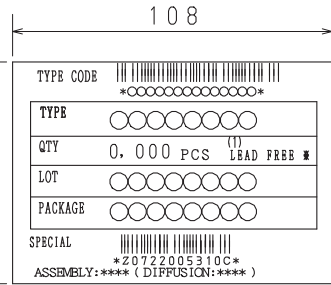
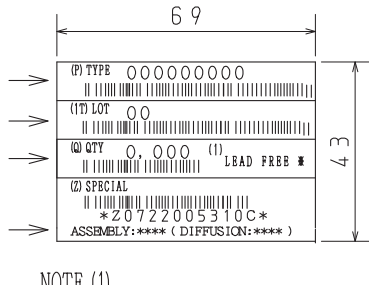
It is a label at the time of factory shipments.  
The form of a label may change in physical distribution process.

Packing method



Reel label

Type No.  
LOT No.  
Quantity  
Origin



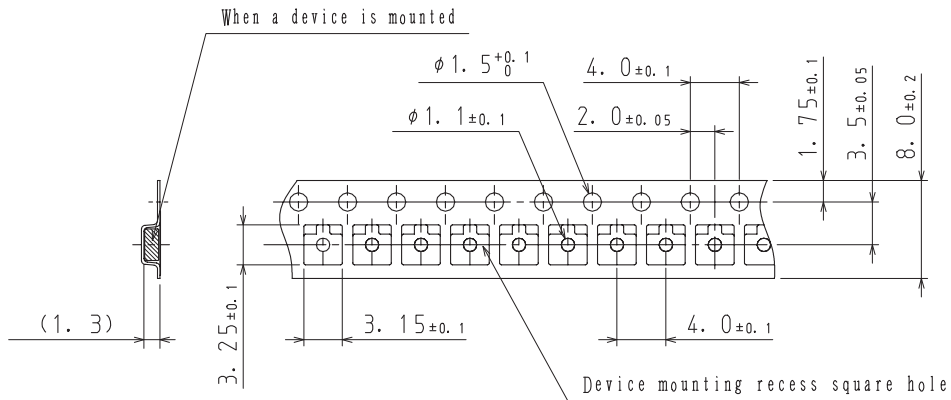
NOTE (1)

The LEAD FREE \* description shows that the surface treatment of the terminal is lead free.

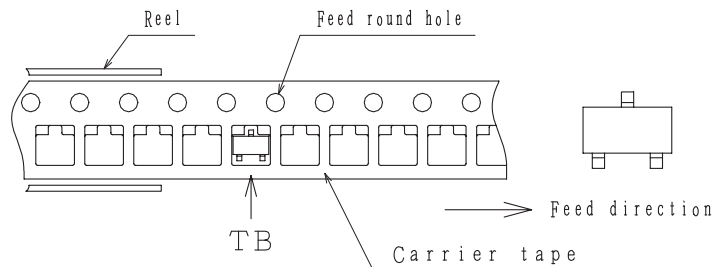
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)



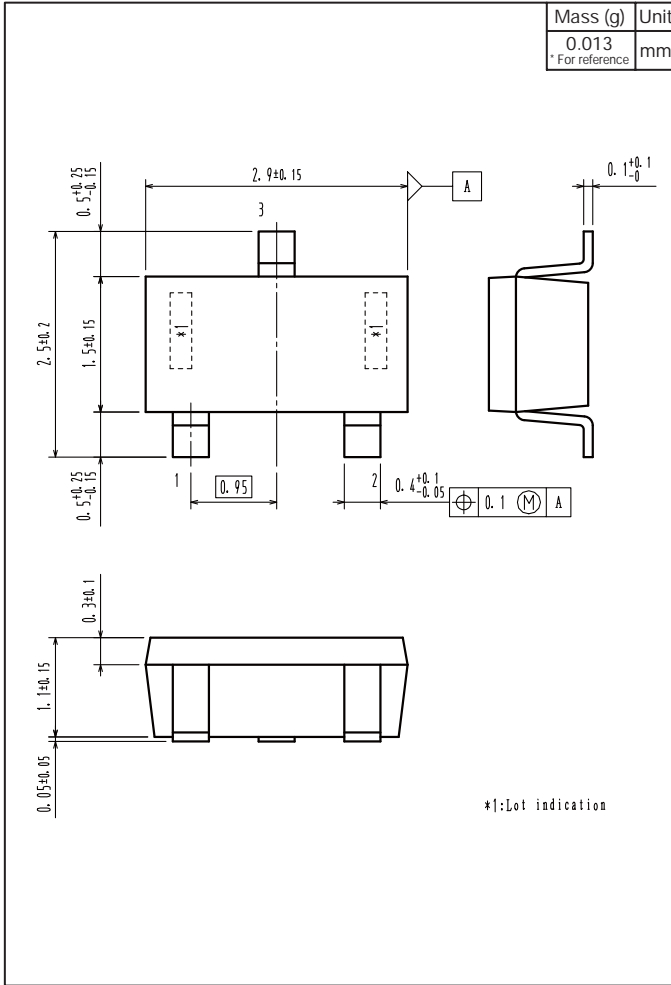
2-2. Device placement direction



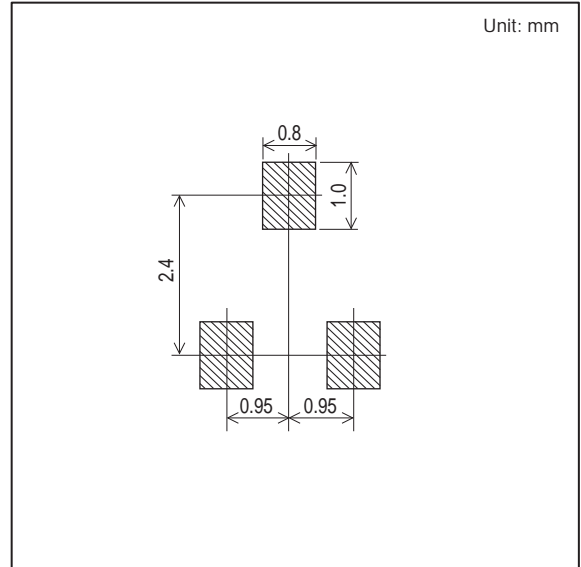
Those with one electrode terminal on the feed hole side.....TB

Outline Drawing

SVC236-TB-E



Land Pattern Example



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