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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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ON Semiconductor®

<http://onsemi.com>

# SVC230

## Varactor Diode

Monolithic dual Varactor Diode for FM Tuning  
16V, 50nA, CR=1.65, Q=100, CP

### Features

- Twin type varactor diode having an excellent large input characteristic, for use in FM electronic tuning applications
- Small CP package permits SVC230 applied sets to be compact and slim
- Possible to be shipped in tape reel packaging, which facilitates automatic insertion
- High Q

### Specifications

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

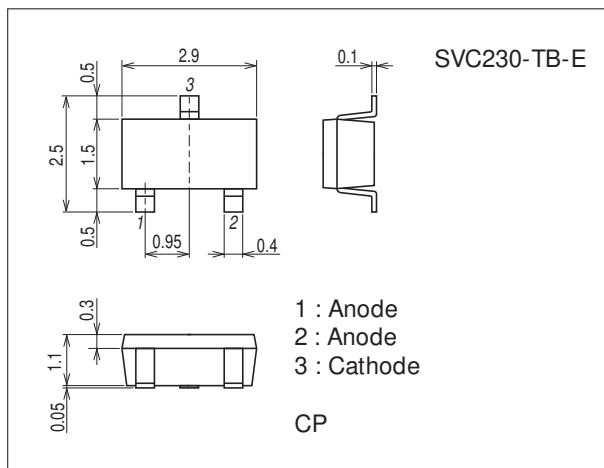
Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V <sub>R</sub>		16	V
Junction Temperature	T <sub>J</sub>		125	°C
Storage Temperature	T <sub>stg</sub>		-55 to +125	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

### Package Dimensions

unit : mm (typ)

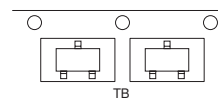
7013A-006



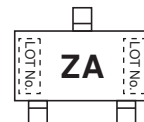
### Product & Package Information

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

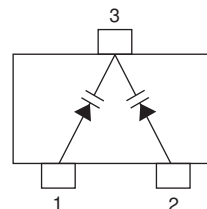
### Packing Type: TB



### Marking



### Electrical Connection



## SVC230

### 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	$I_R$	$V_R=10V$			50	nA
Interterminal Capacitance	*1 C2V	$V_R=2.0V, f=1MHz$	44.0		46.5	pF
	C8V	$V_R=8.0V, f=1MHz$	25.1		28.2	pF
Quality Factor	Q	$V_R=3.0V, f=100MHz$	100			
Capacitance Ratio	$C_R$	C2.0V / C8.0V	1.65		1.75	
Matching Tolerance	*2 $\Delta C_m$	$V_R=2.0V, f=1MHz, (C_{max} \times C_{min}) / C_{min} \times 100$			3	%

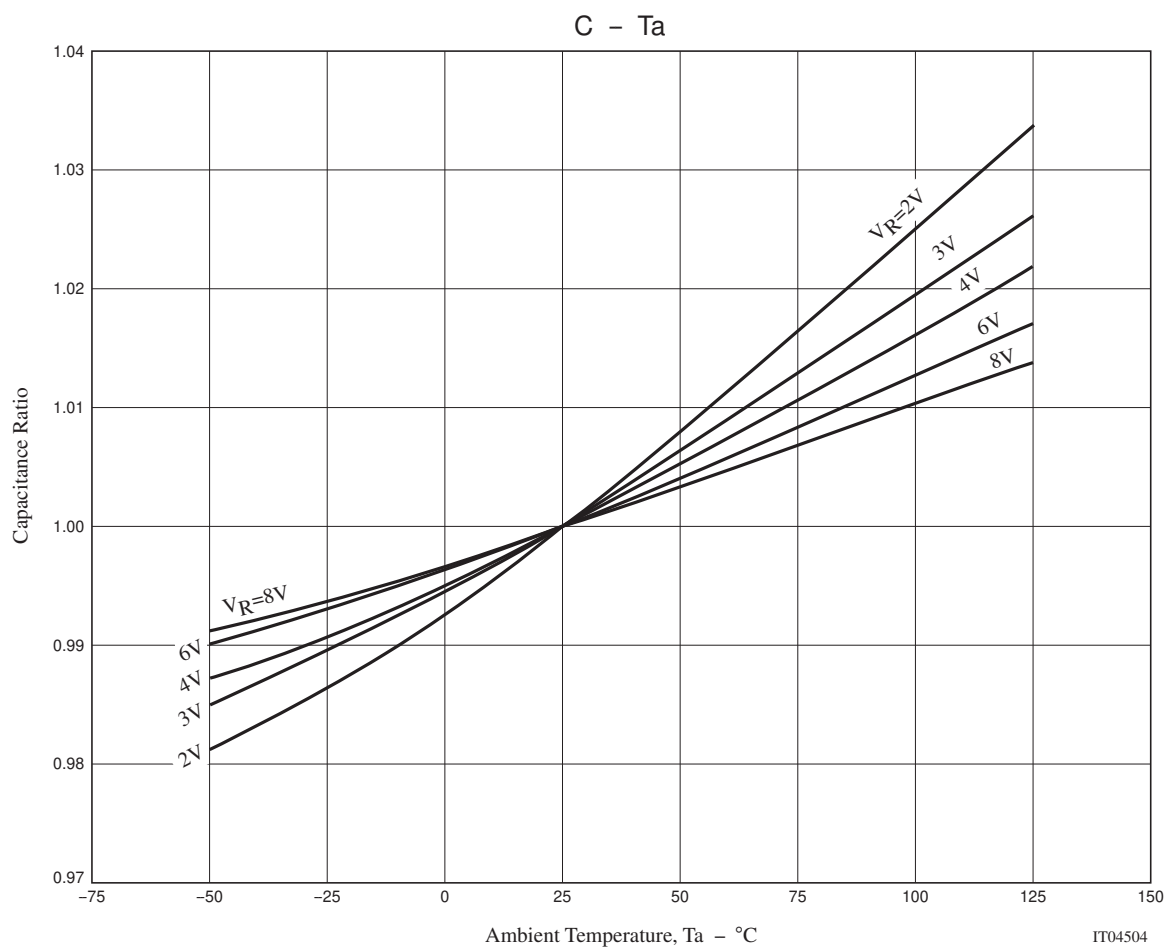
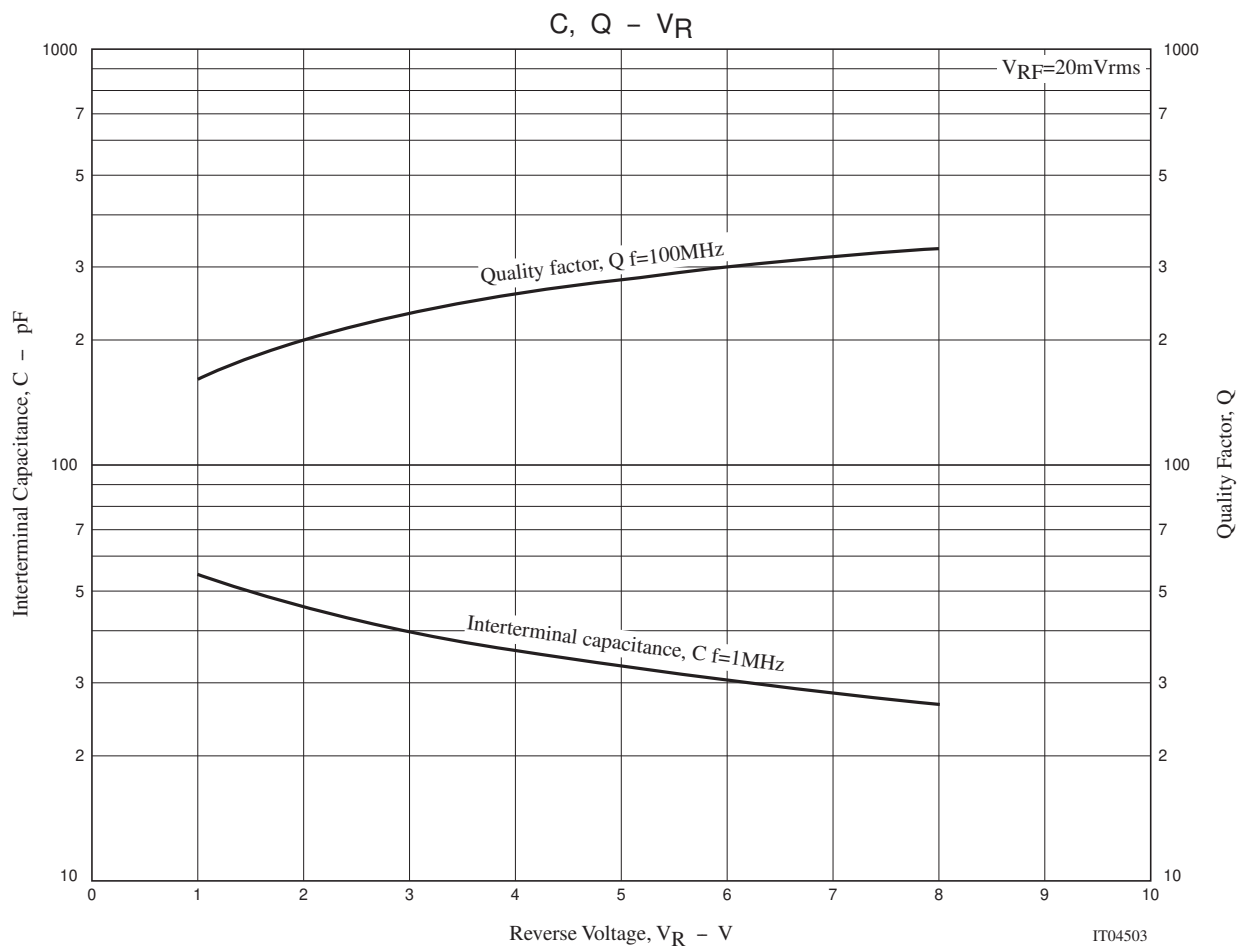
Note) \*1 : Capacitance value of one diode

\*2 : Matching Tolerance is valid for the devices in one taping reel.

### Ordering Information

Device	Package	Shipping	memo
SVC230-TB-E	CP	3,000pcs./reel	Pb Free

# SVC230



## Taping Specification

SVC230-TB-E

## 1. Packing Format

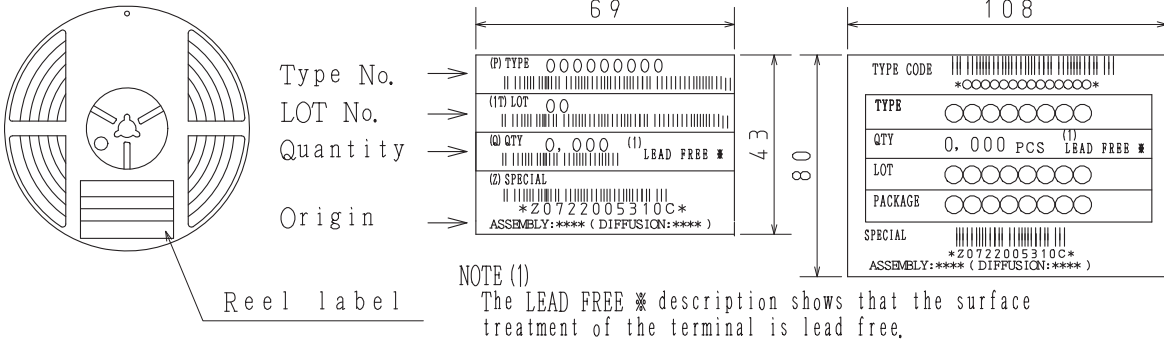
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CP	CP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Reel label, Inner box label  
(unit:mm)

Outer box label

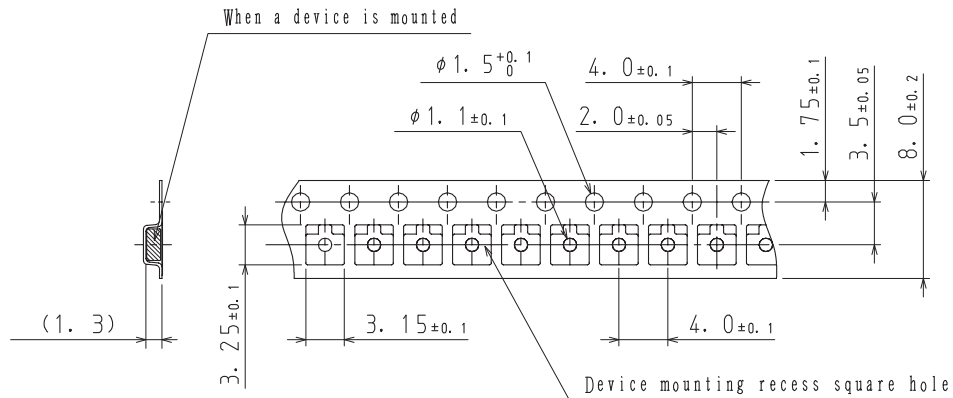
It is a label at the time of factory shipments.  
The form of a label may change in physical  
distribution process.

## Packing method

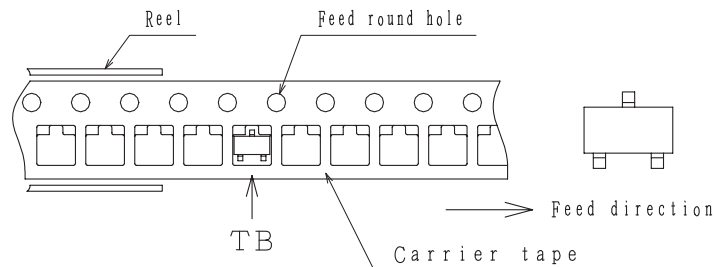


## 2. Taping configuration

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



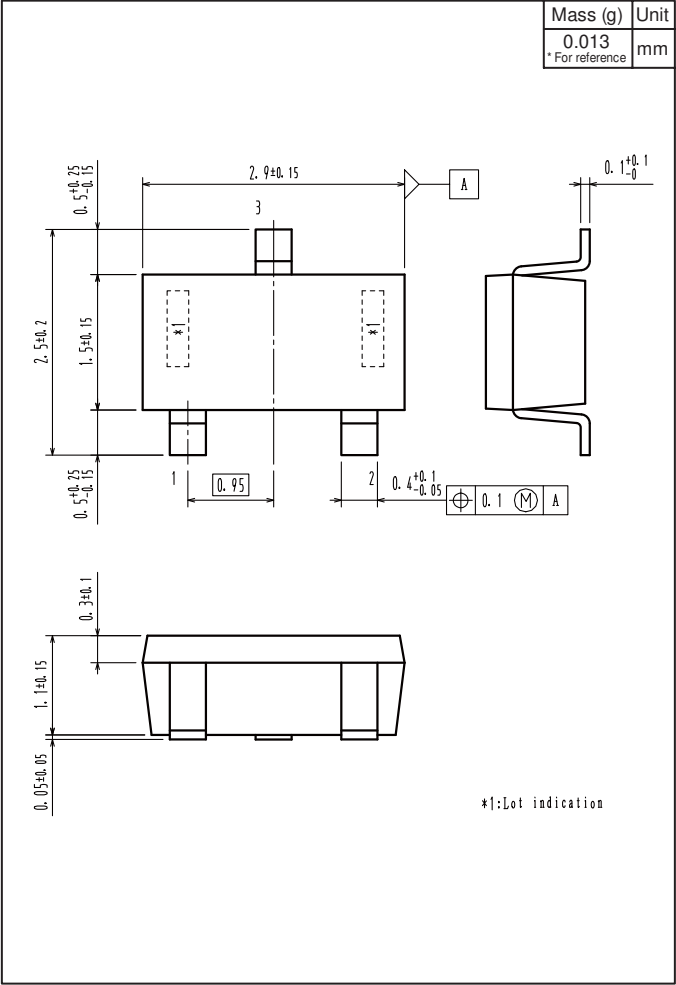
## 2-2. Device placement direction



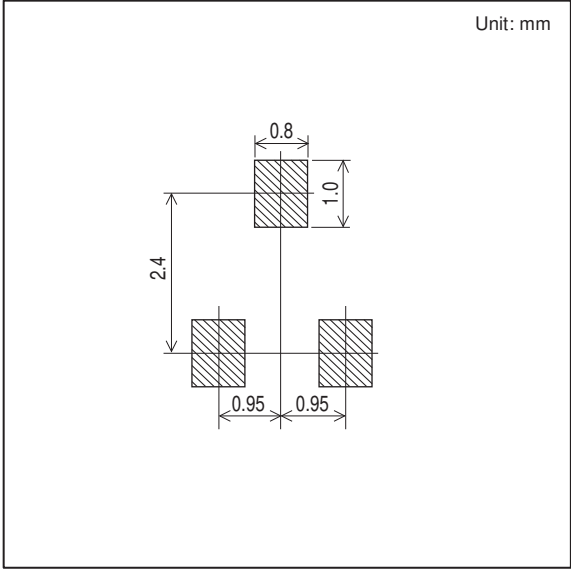
Those with one electrode terminal on the feed hole side.....TB



Outline Drawing  
SVC230-TB-E



Land Pattern Example



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