



# SVC230 — Diffused Junction Type Silicon Diode Varactor Diode for FM Receiver Electronic Tuning Applications

## 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

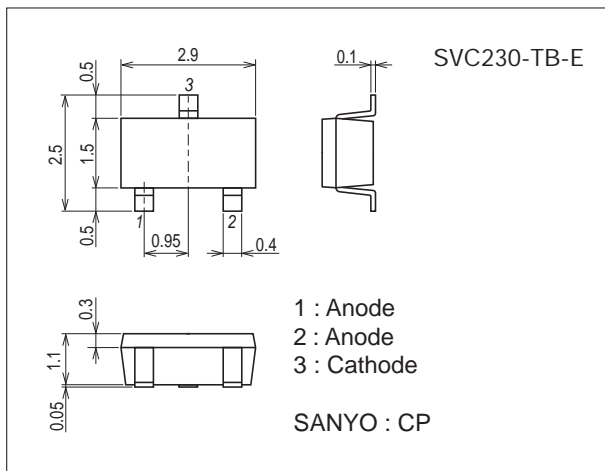
### Absolute Maximum Ratings at Ta=25°C

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

## Package Dimensions

unit : mm (typ)

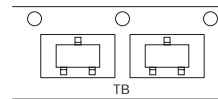
7013A-006



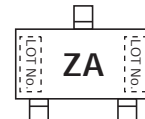
## Product & Package Information

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

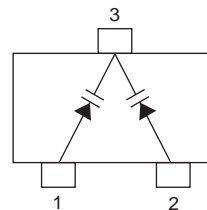
## Packing Type: TB



## Marking



## Electrical Connection



# SVC230

## 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	*1 C2V	V <sub>R</sub> =2.0V, f=1MHz	44.0		46.5	pF
	C8V	V <sub>R</sub> =8.0V, f=1MHz	25.1		28.2	pF
Quality Factor	Q	V <sub>R</sub> =3.0V, f=100MHz	100			
Capacitance Ratio	C <sub>R</sub>	C2.0V / C8.0V	1.65		1.75	
Matching Tolerance	*2 ΔC <sub>m</sub>	V <sub>R</sub> =2.0V, f=1MHz, (C <sub>max</sub> ×C <sub>min</sub> ) / C <sub>min</sub> ×100			3	%

Note) \*1 : Capacitance value of one diode

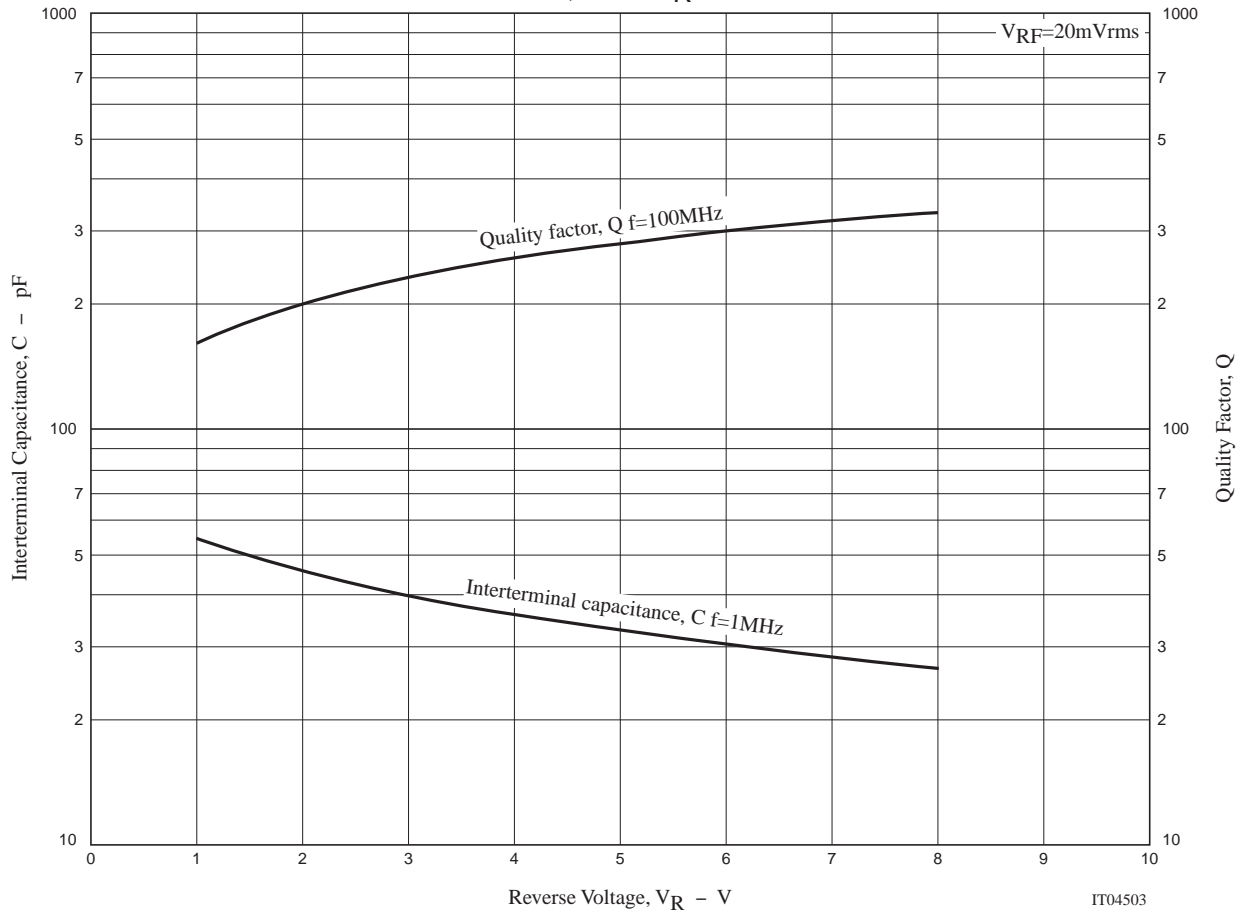
\*2 : Matching Tolerance is valid for the devices in one taping reel.

## Ordering Information

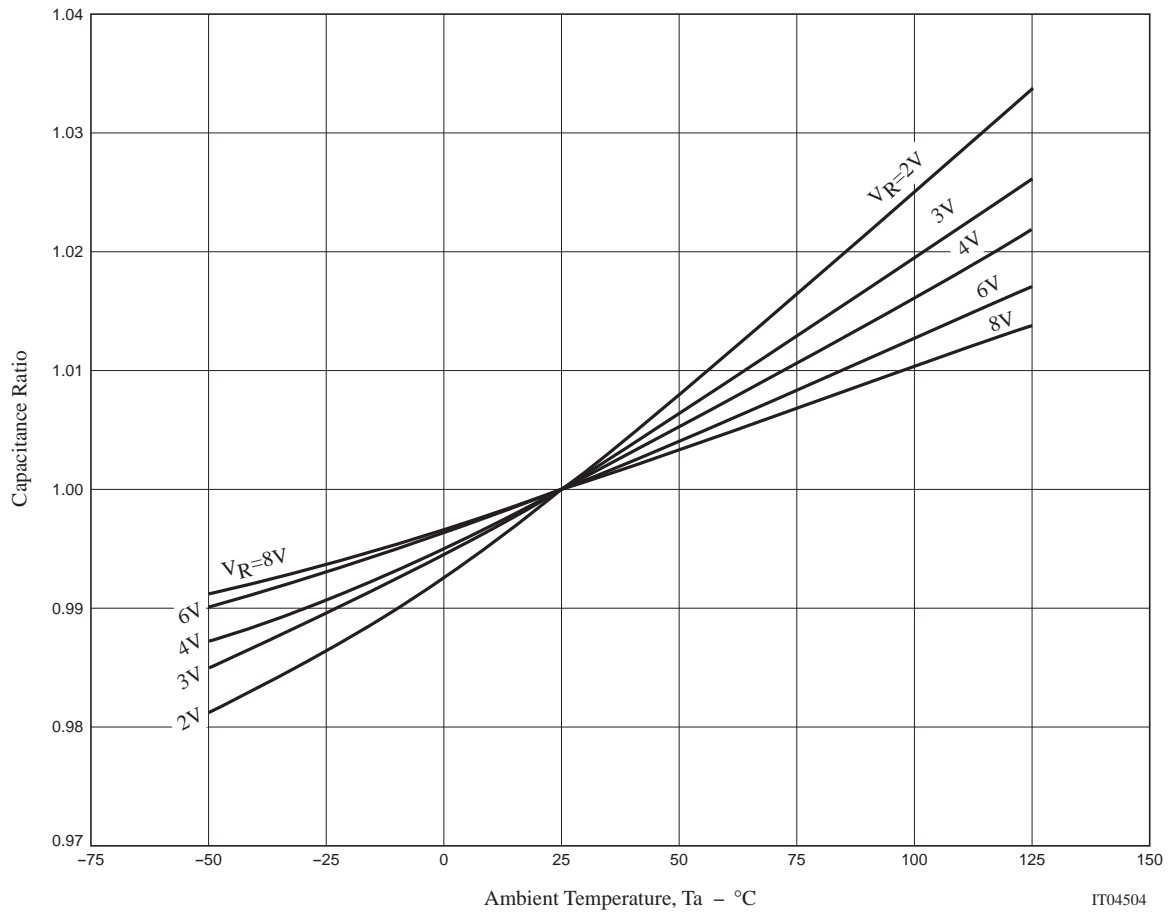
Device	Package	Shipping	memo
SVC230-TB-E	CP	3,000pcs./reel	Pb Free

# SVC230

## C, Q - $V_R$



## C - $T_a$



Taping Specification

SVC230-TB-E

1. Packing Format

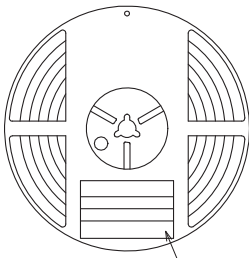
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CP	CP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Reel label, Inner box label  
(unit:mm)

Outer box label

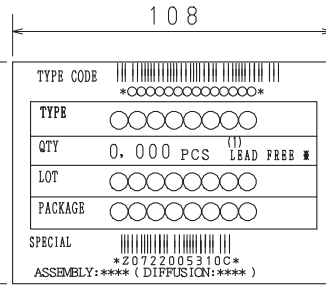
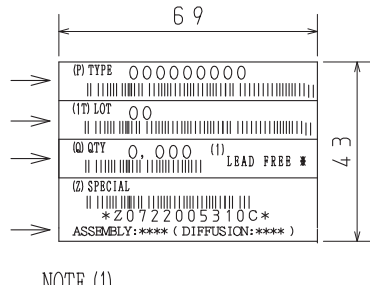
It is a label at the time of factory shipments.  
The form of a label may change in physical distribution process.

Packing method



Reel label

Type No.  
LOT No.  
Quantity  
Origin



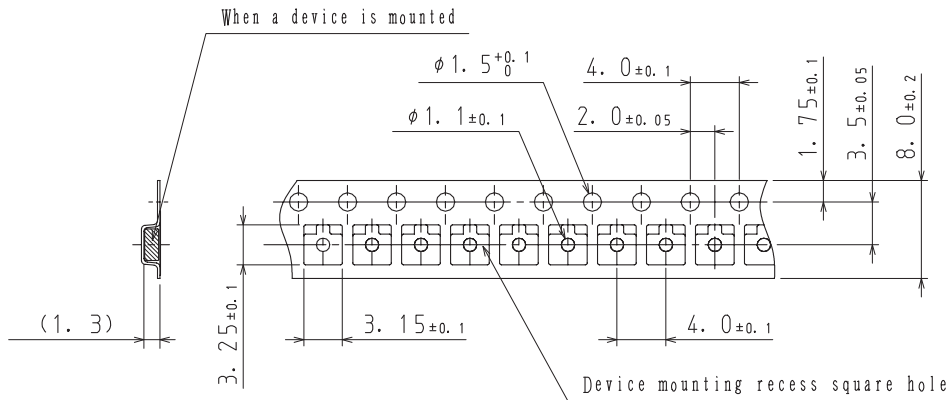
NOTE (1)

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

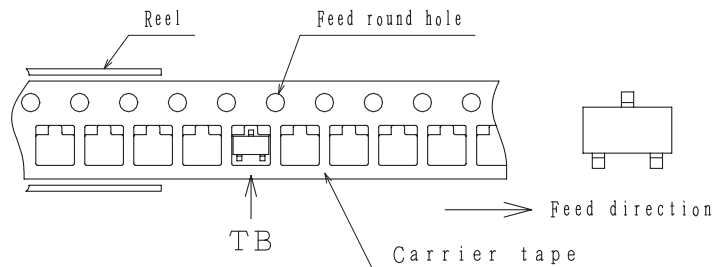
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

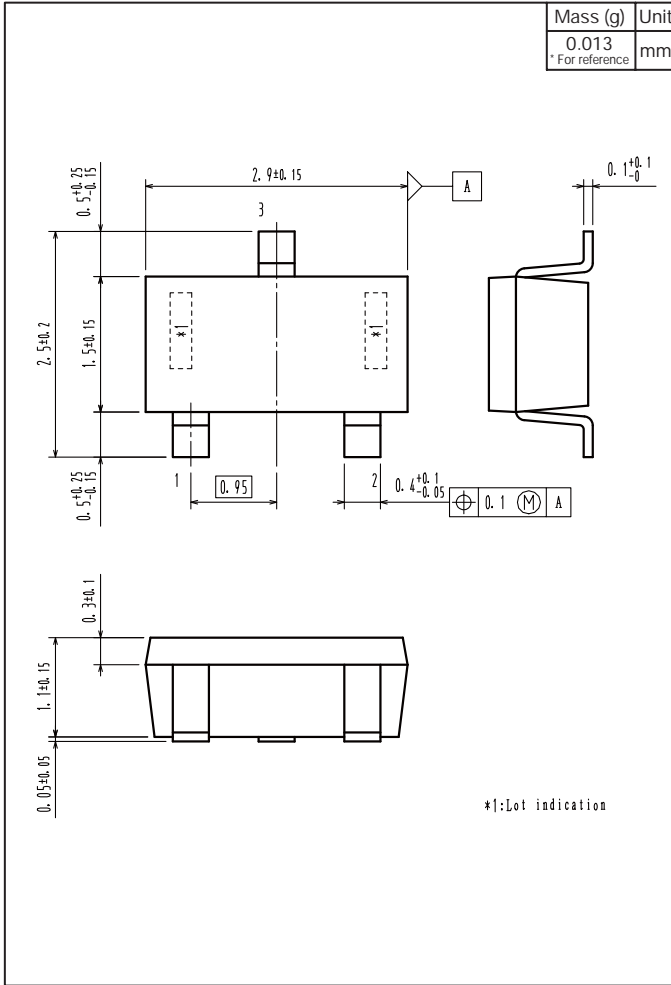


Those with one electrode terminal on the feed hole side.....TB

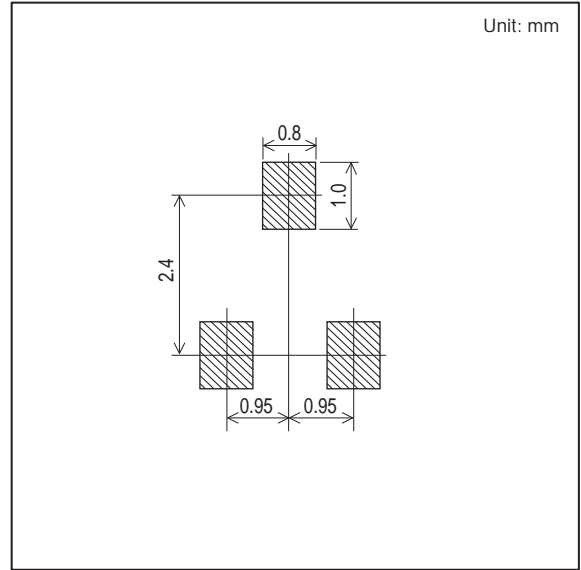
# SVC230

## Outline Drawing

SVC230-TB-E



## Land Pattern Example



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