



SVC230 — Varactor Diode for FM Receiver Electronic Tuning Applications

Diffused Junction Type Silicon Diode

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

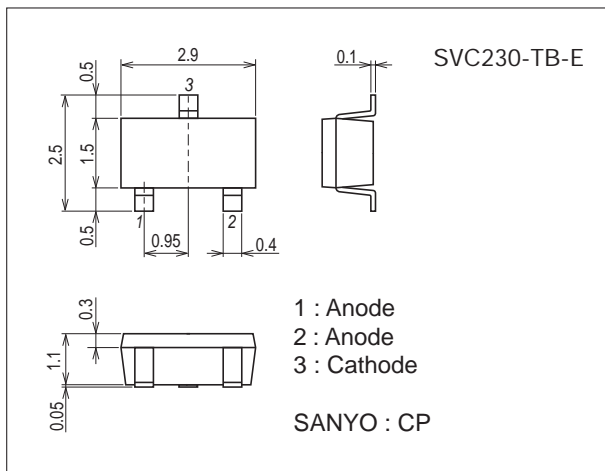
Absolute Maximum Ratings at Ta=25°C

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)

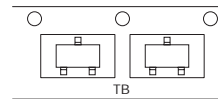
7013A-006



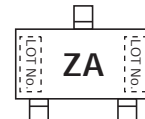
Product & Package Information

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

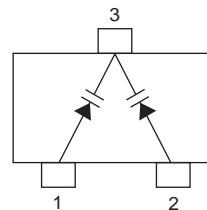
Packing Type: TB



Marking



Electrical Connection



SVC230

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	V(BR)R	I _R =10μA	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 ΔC _m	V _R =2.0V, f=1MHz, (C _{max} ×C _{min}) / C _{min} ×100			3	%

Note) *1 : Capacitance value of one diode

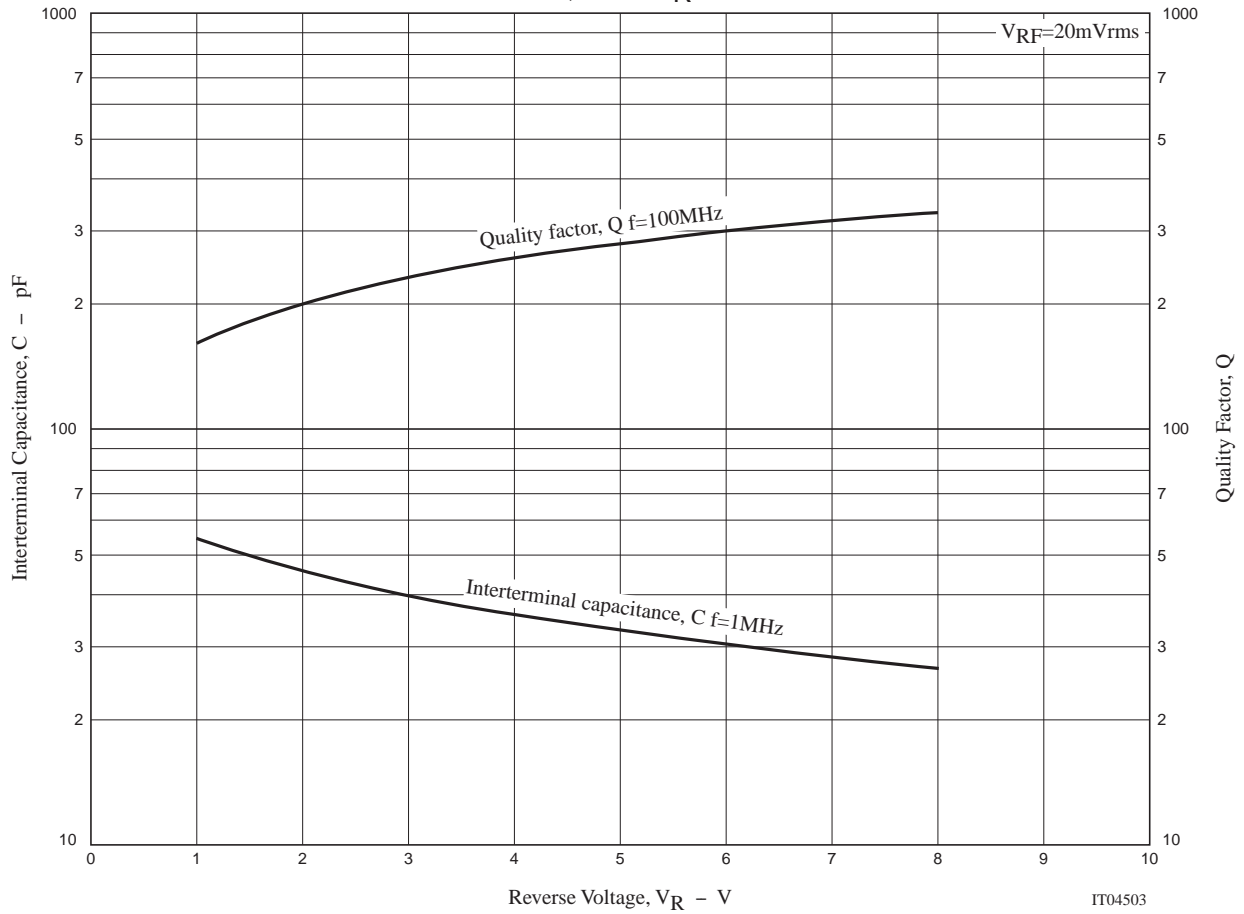
*2 : Matching Tolerance is valid for the devices in one taping reel.

Ordering Information

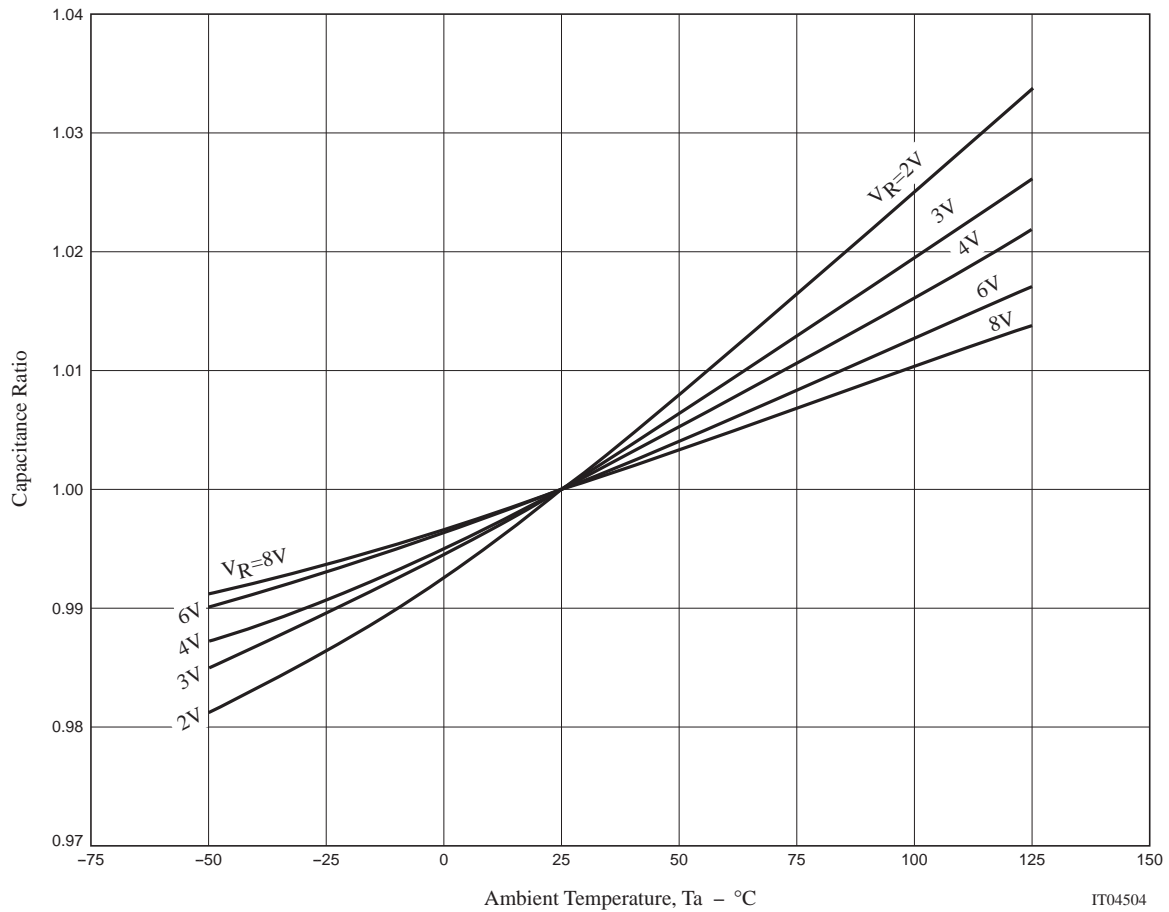
Device	Package	Shipping	memo
SVC230-TB-E	CP	3,000pcs./reel	Pb Free

SVC230

C, Q - V_R



C - T_a



Taping Specification

SVC230-TB-E

1. Packing Format

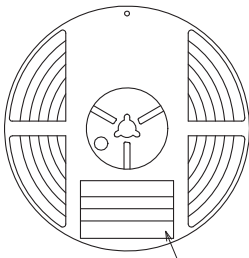
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CP	CP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Reel label, Inner box label
(unit:mm)

Outer box label

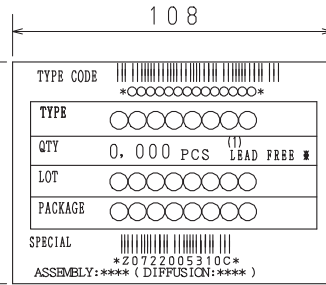
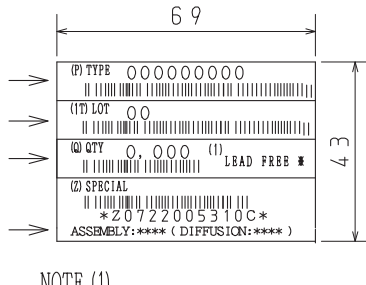
It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.

Packing method



Reel label

Type No.
LOT No.
Quantity
Origin



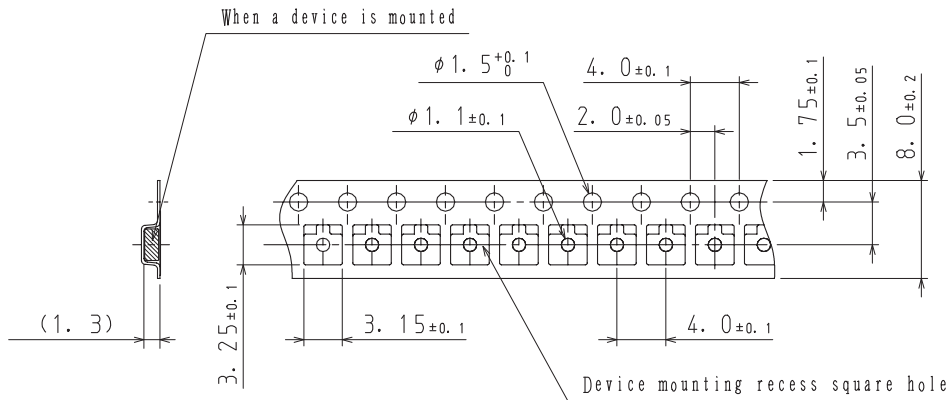
NOTE (1)

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

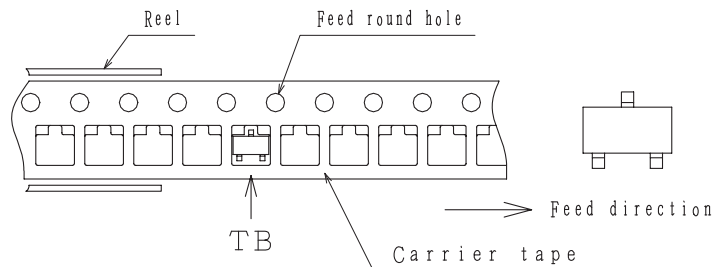
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

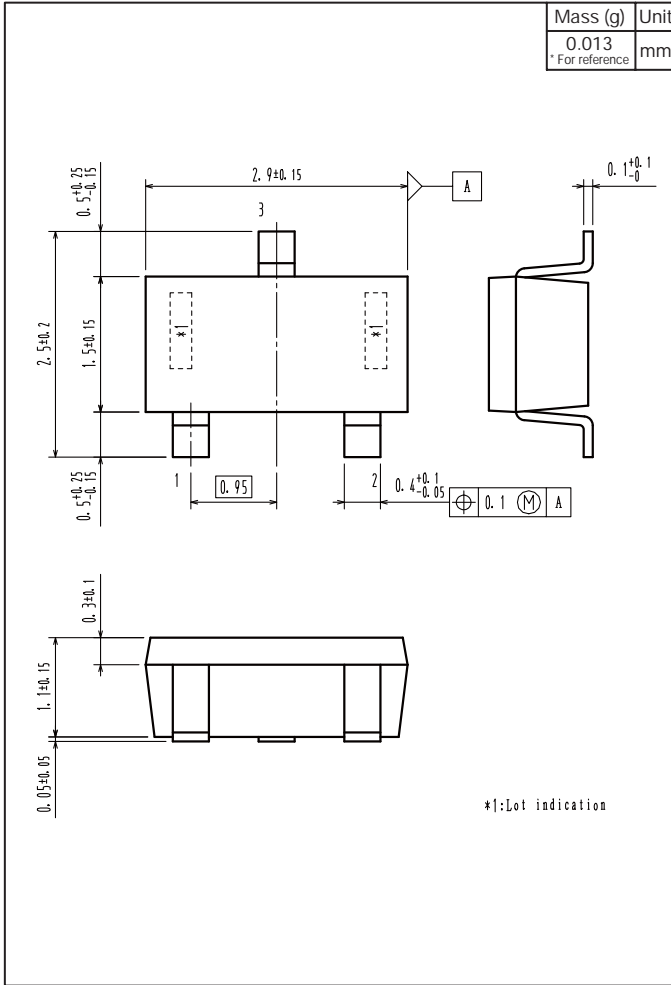


Those with one electrode terminal on the feed hole side.....TB

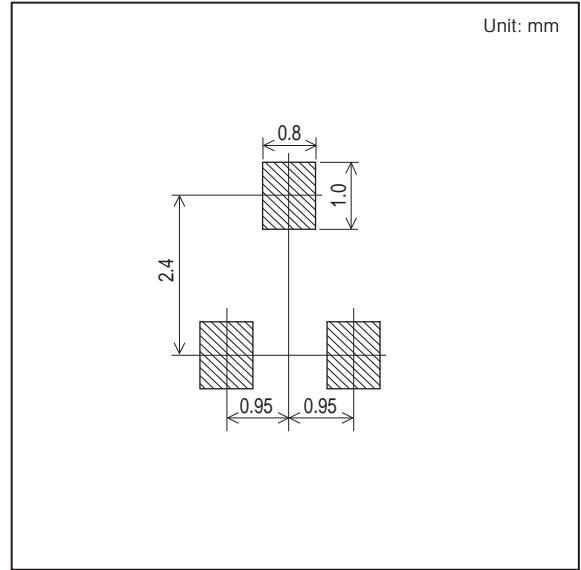
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Outline Drawing

SVC230-TB-E



Land Pattern Example



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