



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

Diffused Junction Type Silicon Diode

SVC236 — Varactor Diode for FM Receiver Electronic Tuning Use

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

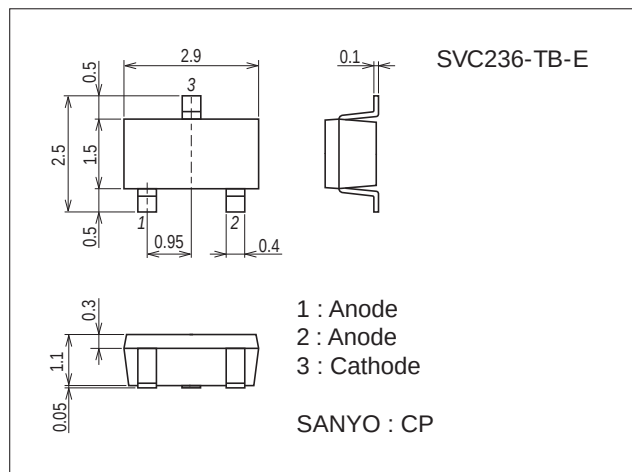
Absolute Maximum Ratings at $T_a=25^\circ C$

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

Package Dimensions

unit : mm (typ)

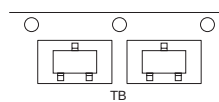
7013A-006



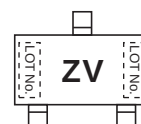
Product & Package Information

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

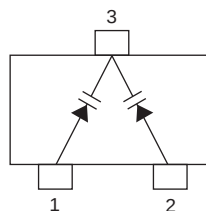
Packing Type: TB



Marking



Electrical Connection



SVC236

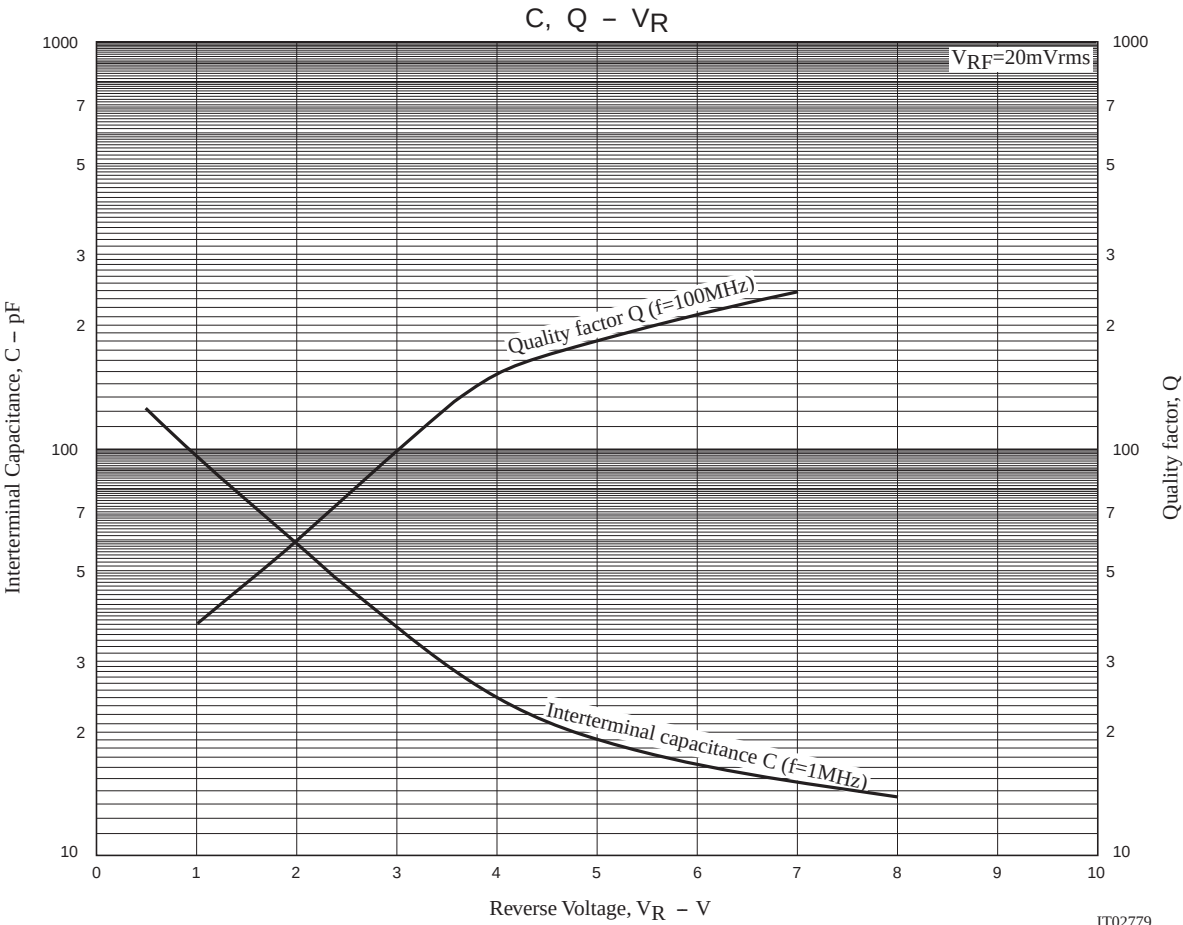
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	16			V
Reverse Current	I_R	$V_R=10V$			50	nA
Interterminal Capacitance *	C1V	$V_R=1.0V, f=1MHz$ *	92.07		102.12	pF
	C3.0V	$V_R=3.0V, f=1MHz$	35.14		41.98	pF
	C6.5V	$V_R=6.5V, f=1MHz$	14.44		16.84	pF
Quality Factor	Q	$V_R=3.0V, f=100MHz$	70			
Capacitance Ratio	C_R	C1.0V / C6.5V	5.0			
Matching Tolerance	ΔC_m	$V_R=1.0V, 3.0, 6.5, f=1MHz, (C_{max} \times C_{min}) / C_{min} \times 100$			3.0	%

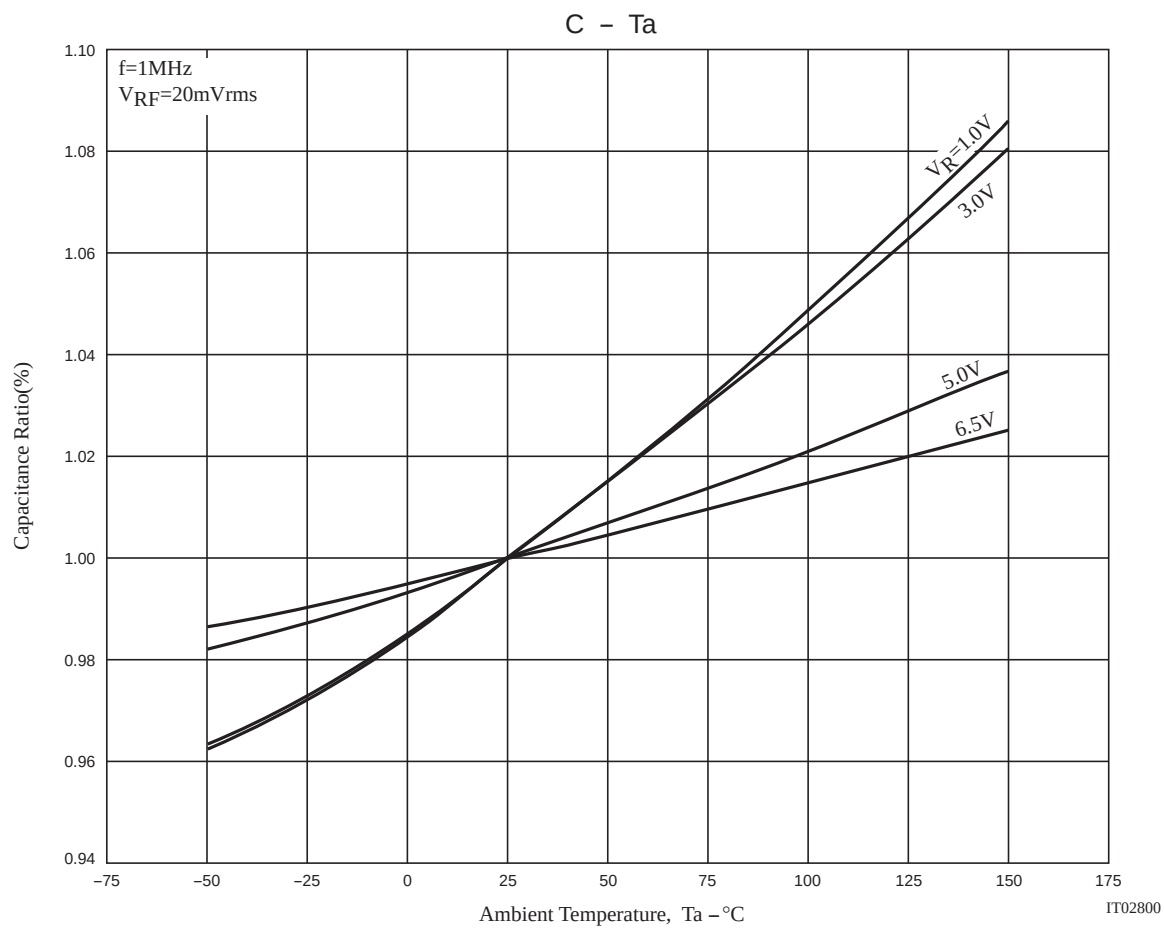
Note) * : Capacitance value per each diode. * : 1MHz signal : 20mVrms

Ordering Information

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



SVC236



Taping Specification

SVC236-TB-E

1. Packing Format

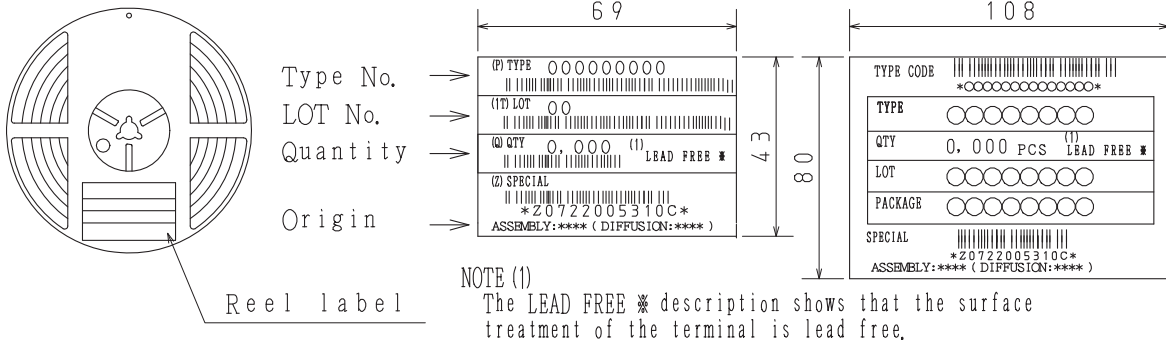
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CP	CP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

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.

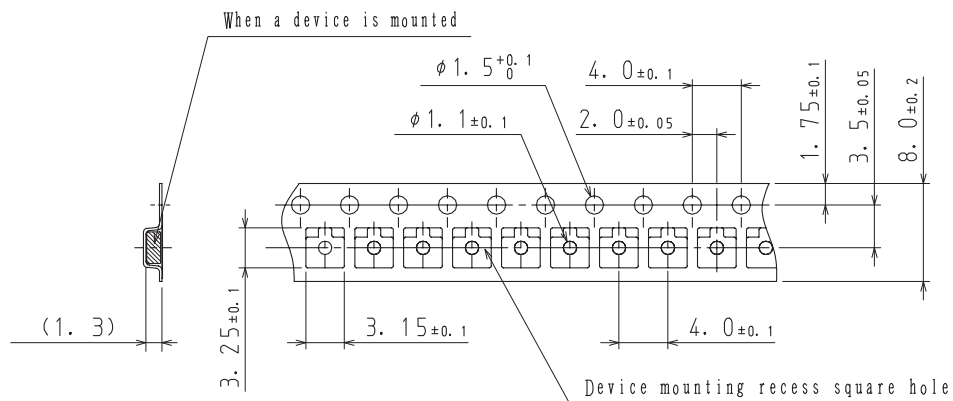
Packing method



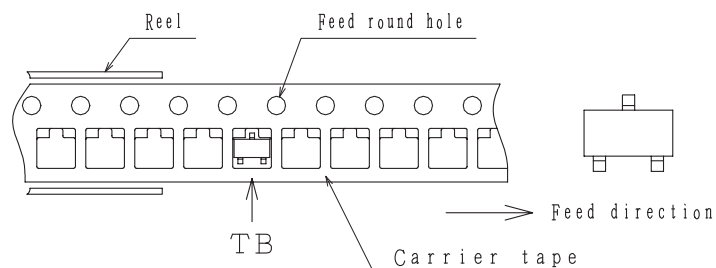
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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

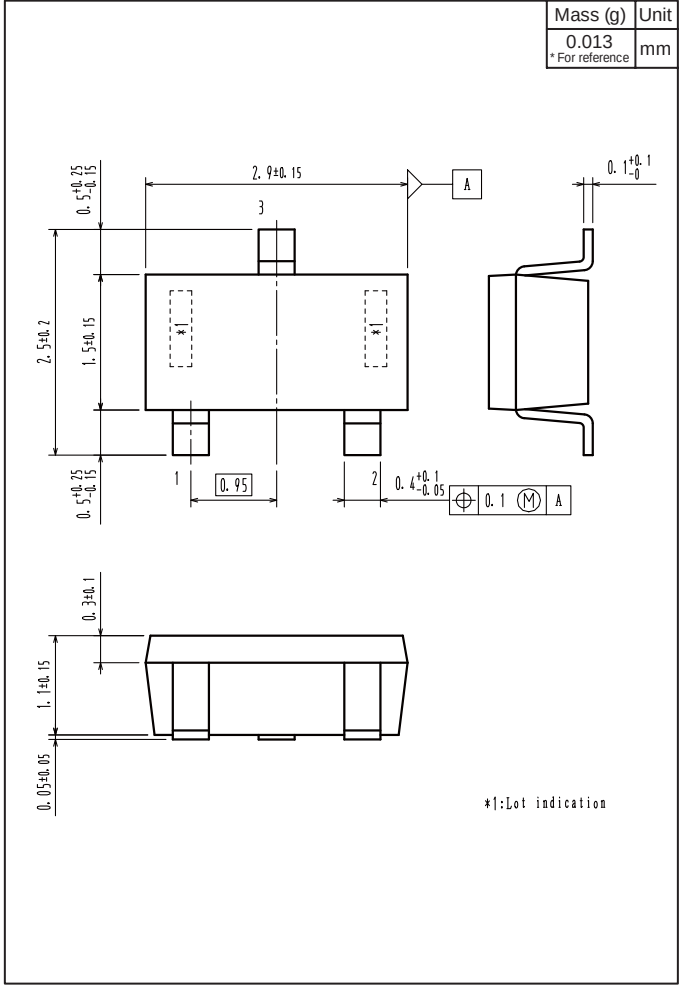


2-2. Device placement direction

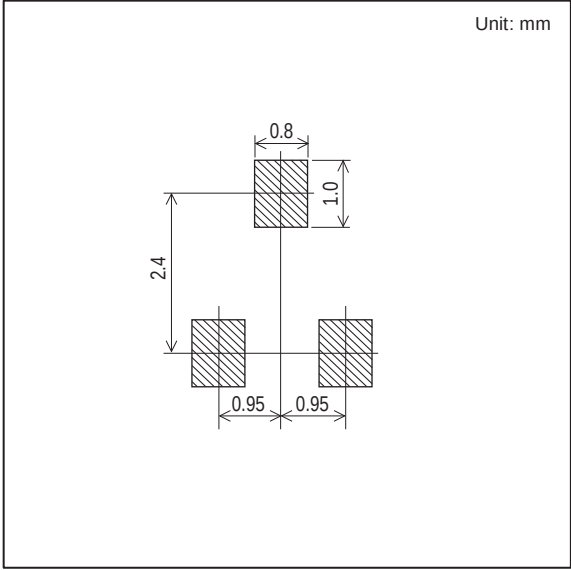


Those with one electrode terminal on the feed hole side.....TB

Outline Drawing
SVC236-TB-E



Land Pattern Example



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