



# SVC270 — 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 MCPH package permits SVC270-applied sets to be compact and slim
- Possible to be shipped in tape reel packaging, which facilitates automatic insertion
- High Q

## Specifications

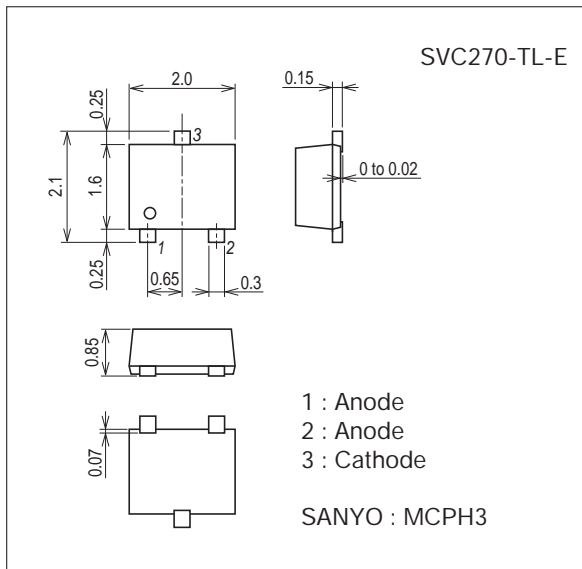
### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		16	V
Junction Temperature	$T_j$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

## Package Dimensions

unit : mm (typ)

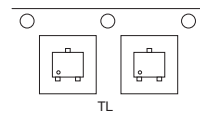
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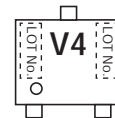
## Product & Package Information

- Package : MCPH3
- JEITA, JEDEC : SC-70, SOT-323
- Minimum Packing Quantity : 3,000 pcs./reel

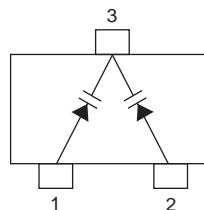
## Packing Type : TL



## Marking



## Electrical Connection



# SVC270

## Electrical Characteristics at Ta=25°C

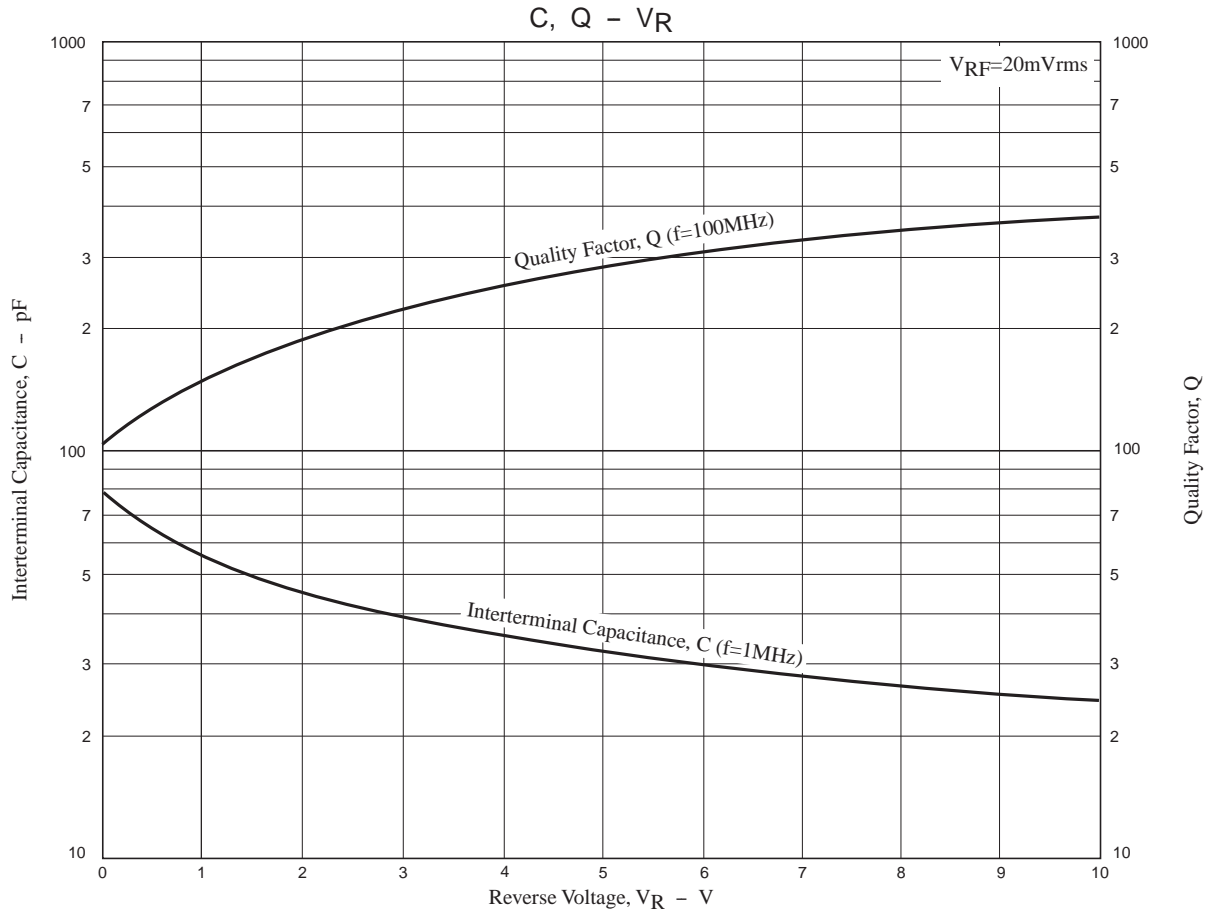
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	V(BR)R	I <sub>R</sub> =10μA	16			V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =10V			50	nA
Interterminal Capacitance*	C2.0V	V <sub>R</sub> =2.0V, f=1MHz	44.0		46.5	pF
	C8.0V	V <sub>R</sub> =8.0V, f=1MHz	25.1		28.2	pF
Quality 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			2.5	%

Note)\*1 : Capacitance value per each diode.

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

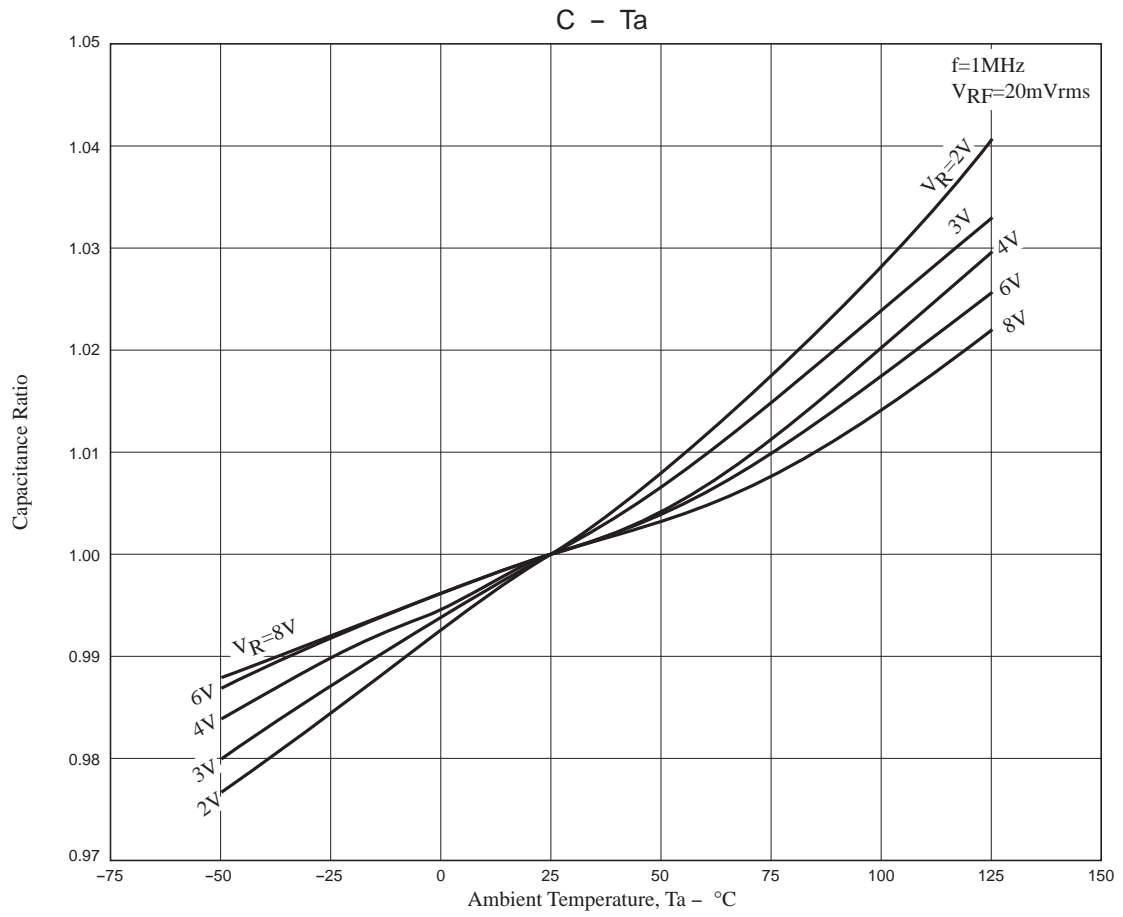
## Ordering Information

Device	Package	Shipping	memo
SVC270-TL-E	MCPH3	3,000pcs./reel	Pb Free



IT10094

# SVC270



IT10095

Taping Specification

SVC270-TL-E

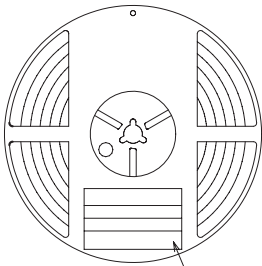
1. Packing Format

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)
MCPH3	MCPH3	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)

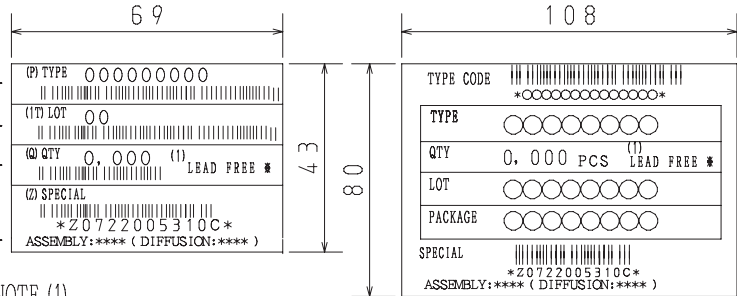
Outer box label  
It is a label at the time of factory shipments.  
The form of a label may change in physical distribution process.

Packing method



Type No.  
LOT No.  
Quantity  
Origin

Reel label



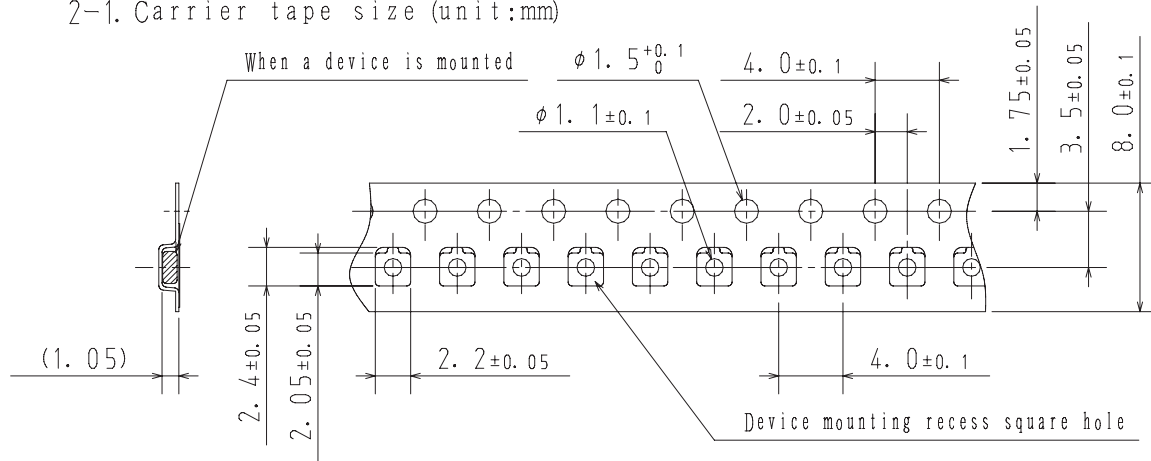
NOTE (1)

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

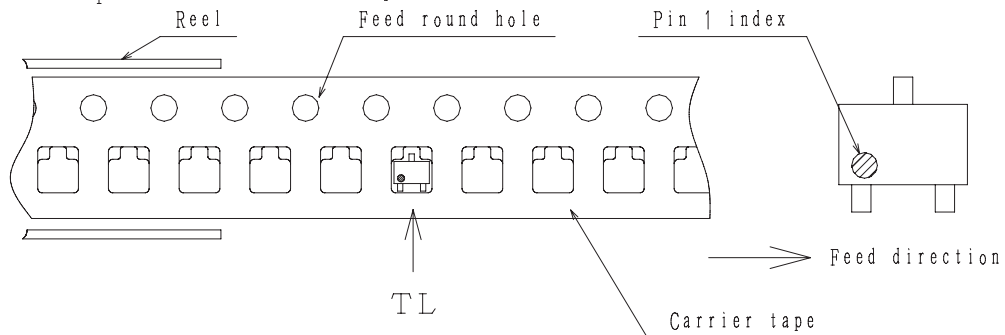
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

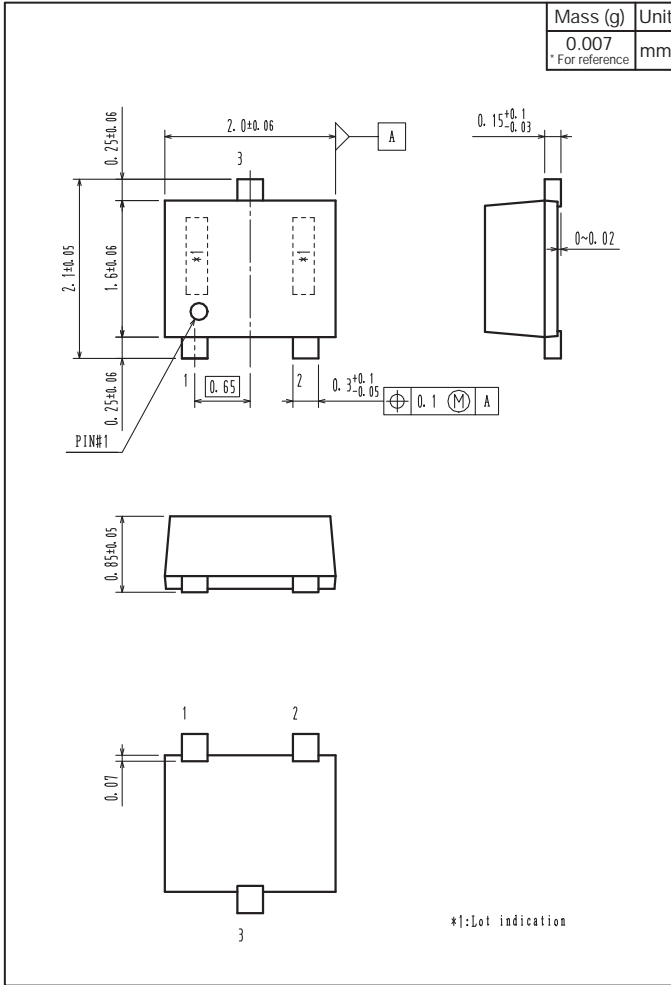


Those with pin 1 index on the feed hole side.....TL

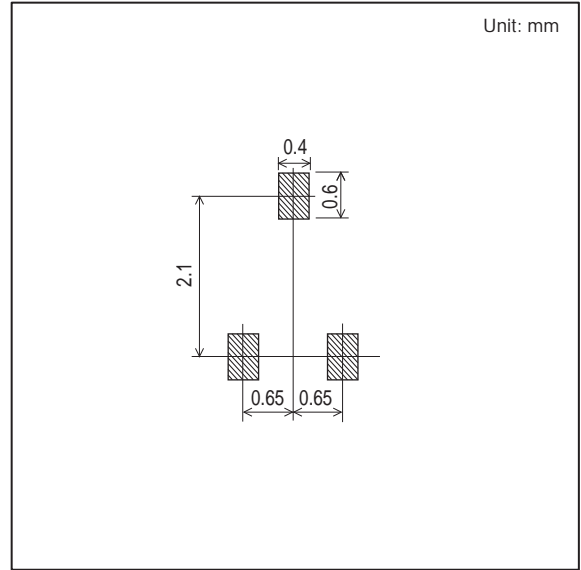
# SVC270

## Outline Drawing

SVC270-TL-E



## Land Pattern Example



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