



SANYO Semiconductors

# DATA SHEET

An ON Semiconductor Company

## SVC704 — Silicon Diffused Junction Type Varactor Diode Varactor Diode for AFC, VCO

### Features

- High capacitance ratio ( $V_R=1.0$  to  $7.0V$ )
- Small-sized package
- Low series resistance

### Specifications

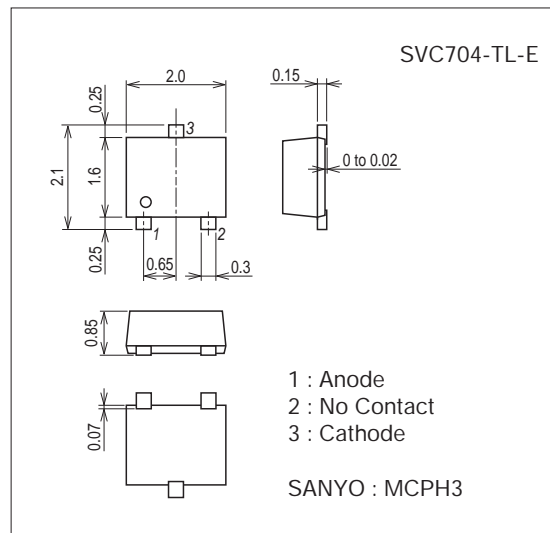
Absolute Maximum Ratings at  $T_a=25^\circ C$ 

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

### Package Dimensions

unit : mm (typ)

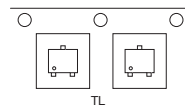
7019A-001



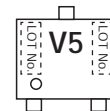
### Product & Package Information

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

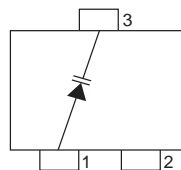
### Packing Type : TL



### Marking



### Electrical Connection



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<http://semicon.sanyo.com/en/network>

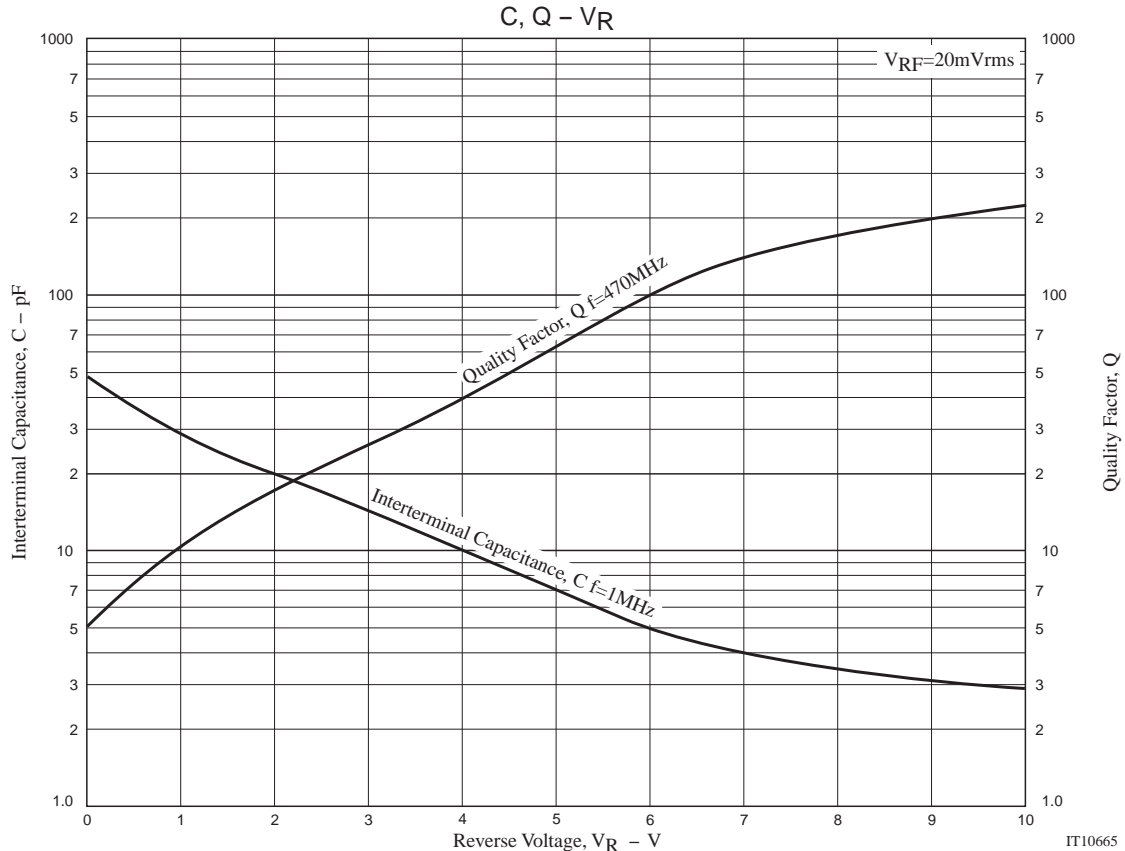
# SVC704

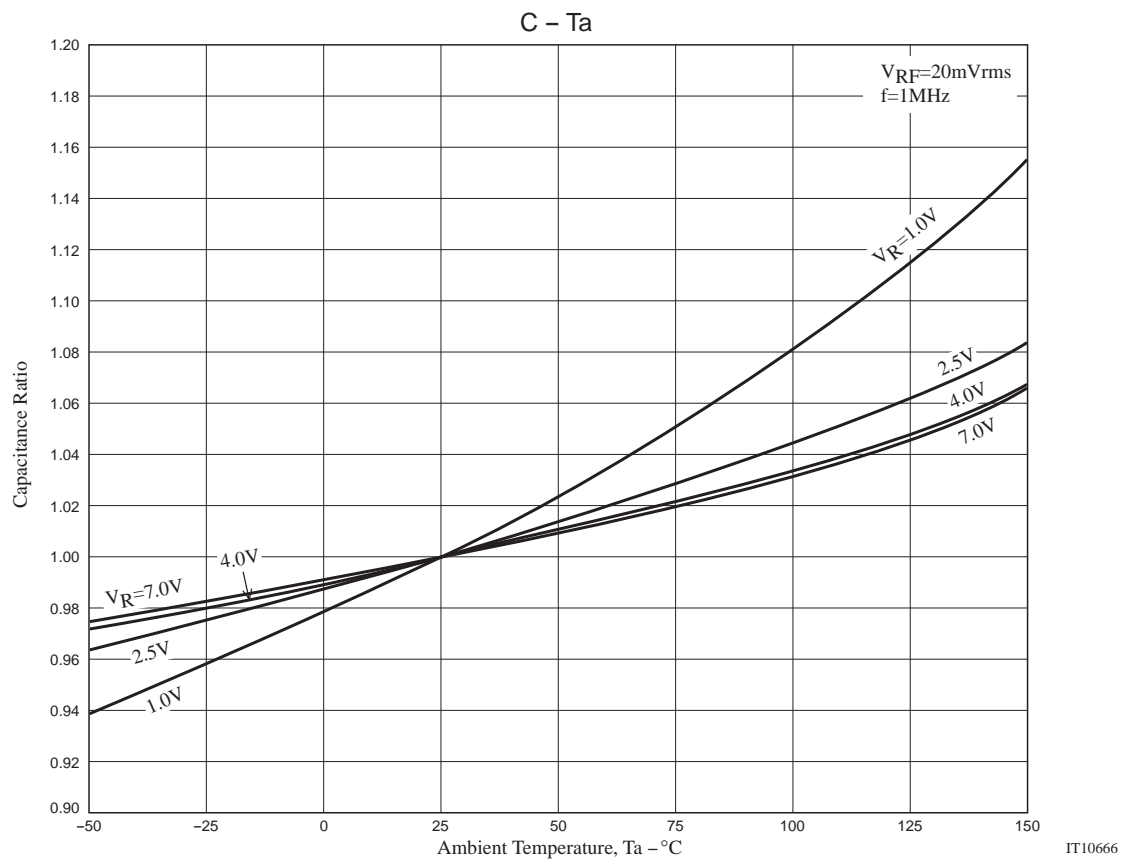
## Electrical Characteristics at Ta=25°C

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*	C1.0V	$V_R=1.0V, f=1MHz$	26.0		30.0	pF
	C7.0V	$V_R=7.0V, f=1MHz$	3.4		4.6	pF
Series Resistance	$r_s$	$V_R=1.0V, f=470MHz$			0.8	$\Omega$
Capacitance Ratio	CR	C1.0V / C7.0V	6.0			

## Ordering Information

Device	Package	Shipping	memo
SVC704-TL-E	MCPH3	3,000pcs./reel	Pb Free





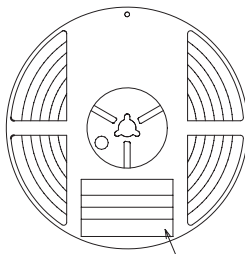
## Taping Specification

SVC704-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

## Packing method



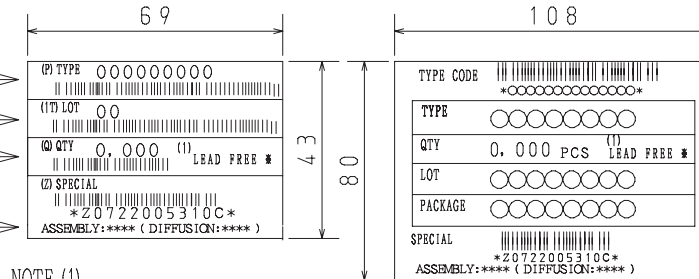
Type No.  
LOT No.  
Quantity  
Origin

Reel label

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.



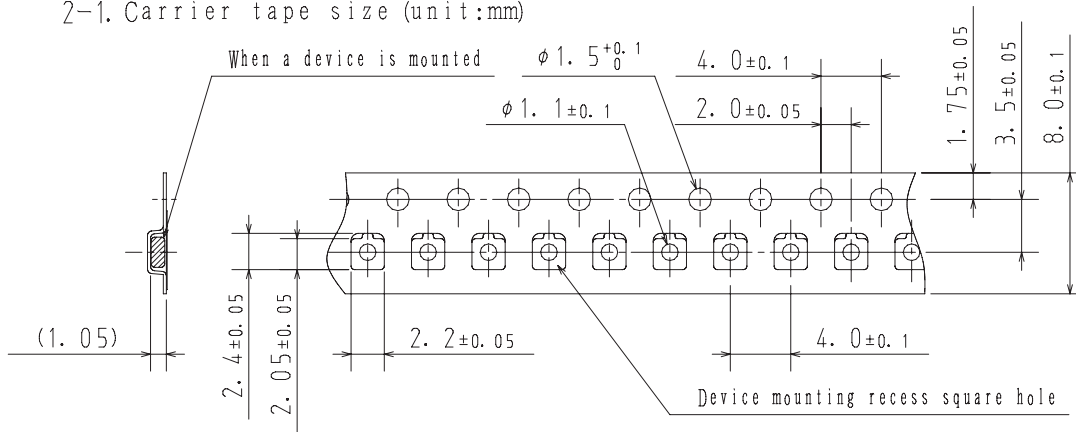
NOTE (1)

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

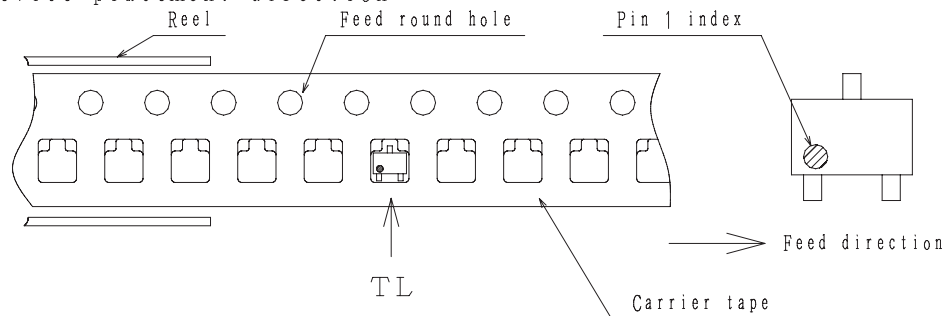
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

## 2. Taping configuration

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



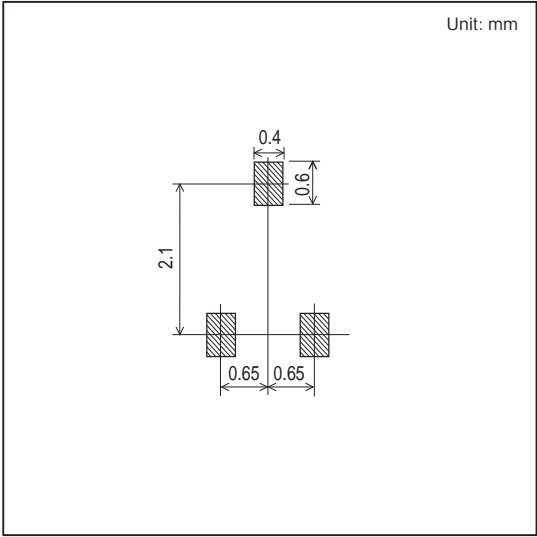
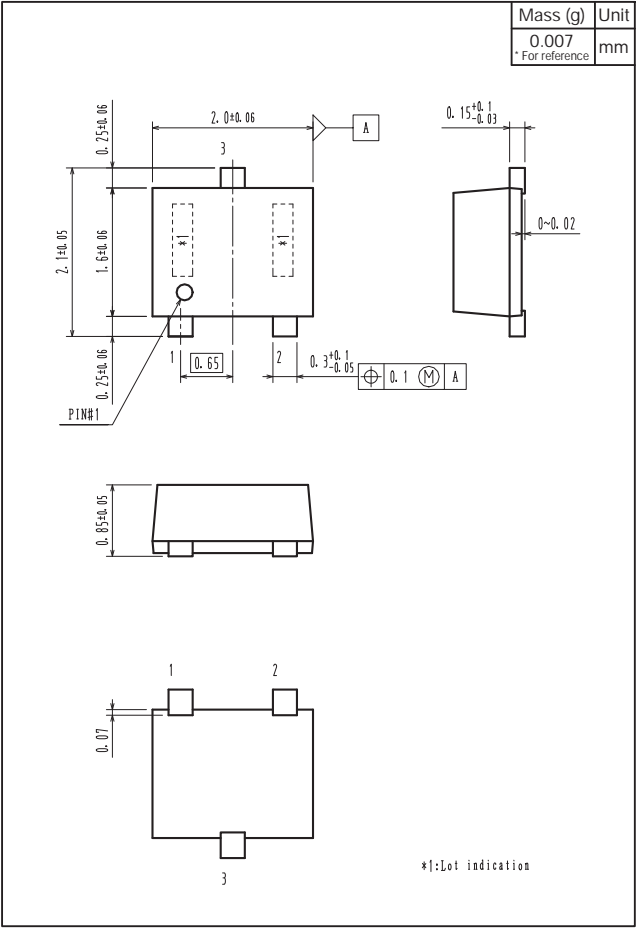
## 2-2. Device placement direction



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

Outline Drawing  
SVC704-TL-E

Land Pattern Example



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