Ordering number : EN7280A

SVC230

Varactor Diode

Monolithic dual Varactor Diode for FM Tuning
16V, 50nA, C_R=1.65, Q=100, CP

ON Semiconductor®

http://onsemi.com

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

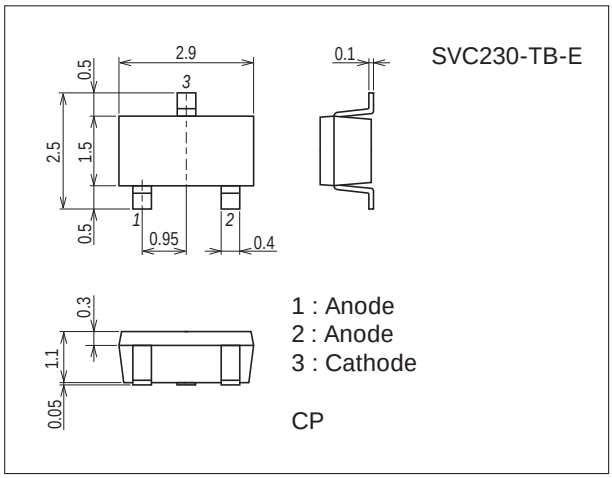
Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		16	V
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		−55 to +125	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

unit : mm (typ)

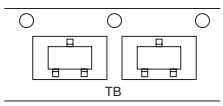
7013A-006



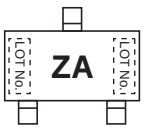
Product & Package Information

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

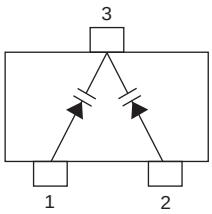
Packing Type: TB



Marking



Electrical Connection



Electrical Characteristics at Ta=25°C

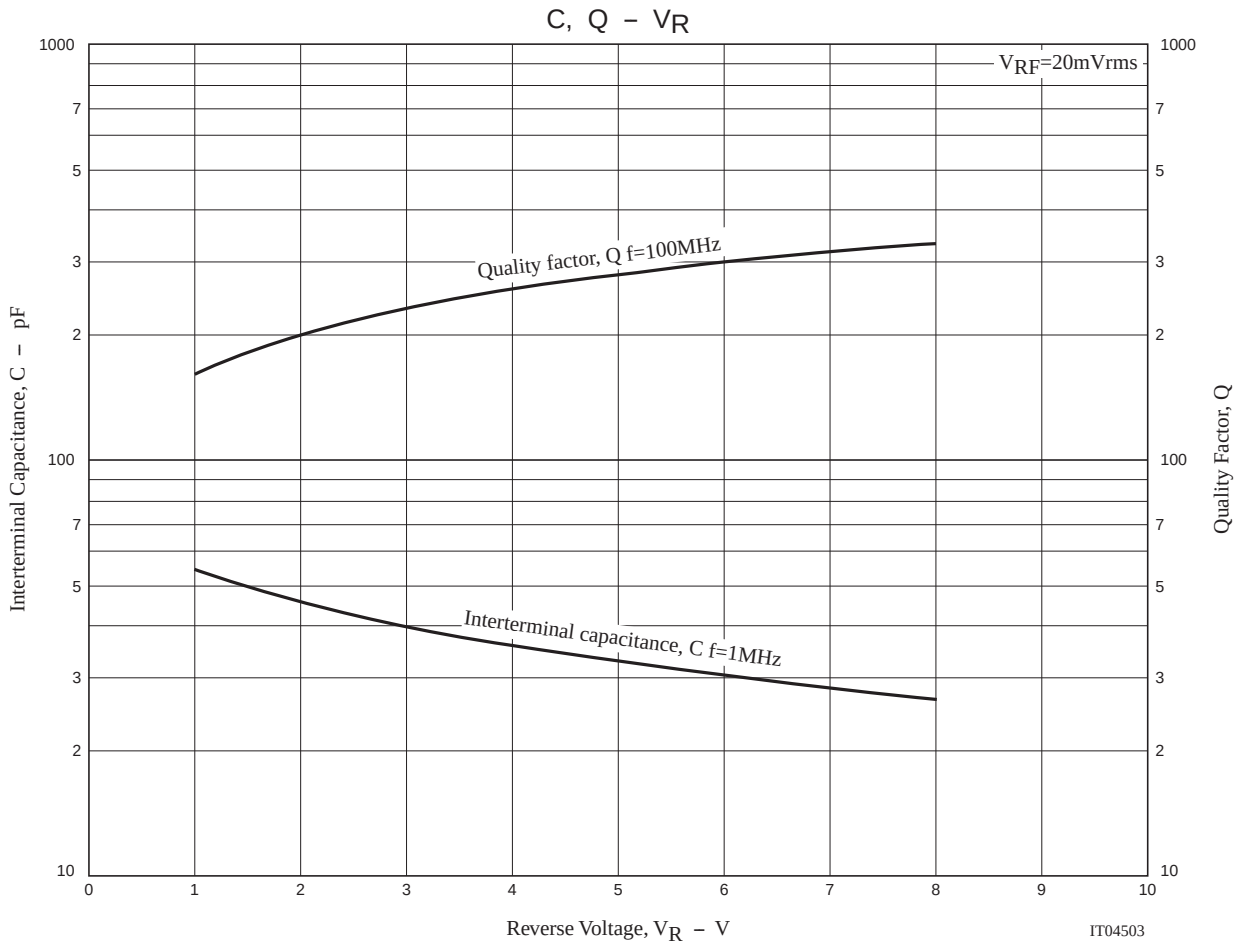
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	I_R=10μA	16			V
Reverse Current	I_R	V_R=10V			50	nA
Interterminal Capacitance *1	C2V	V_R=2.0V, f=1MHz	44.0		46.5	pF
	C8V	V_R=8.0V, f=1MHz	25.1		28.2	pF
Quality Factor	Q	V_R=3.0V, f=100MHz	100			
Capacitance Ratio	C_R	C2.0V / C8.0V	1.65		1.75	
Matching Tolerance *2	ΔC_m	V_R=2.0V, f=1MHz, (Cmax×Cmin) / Cmin×100			3	%

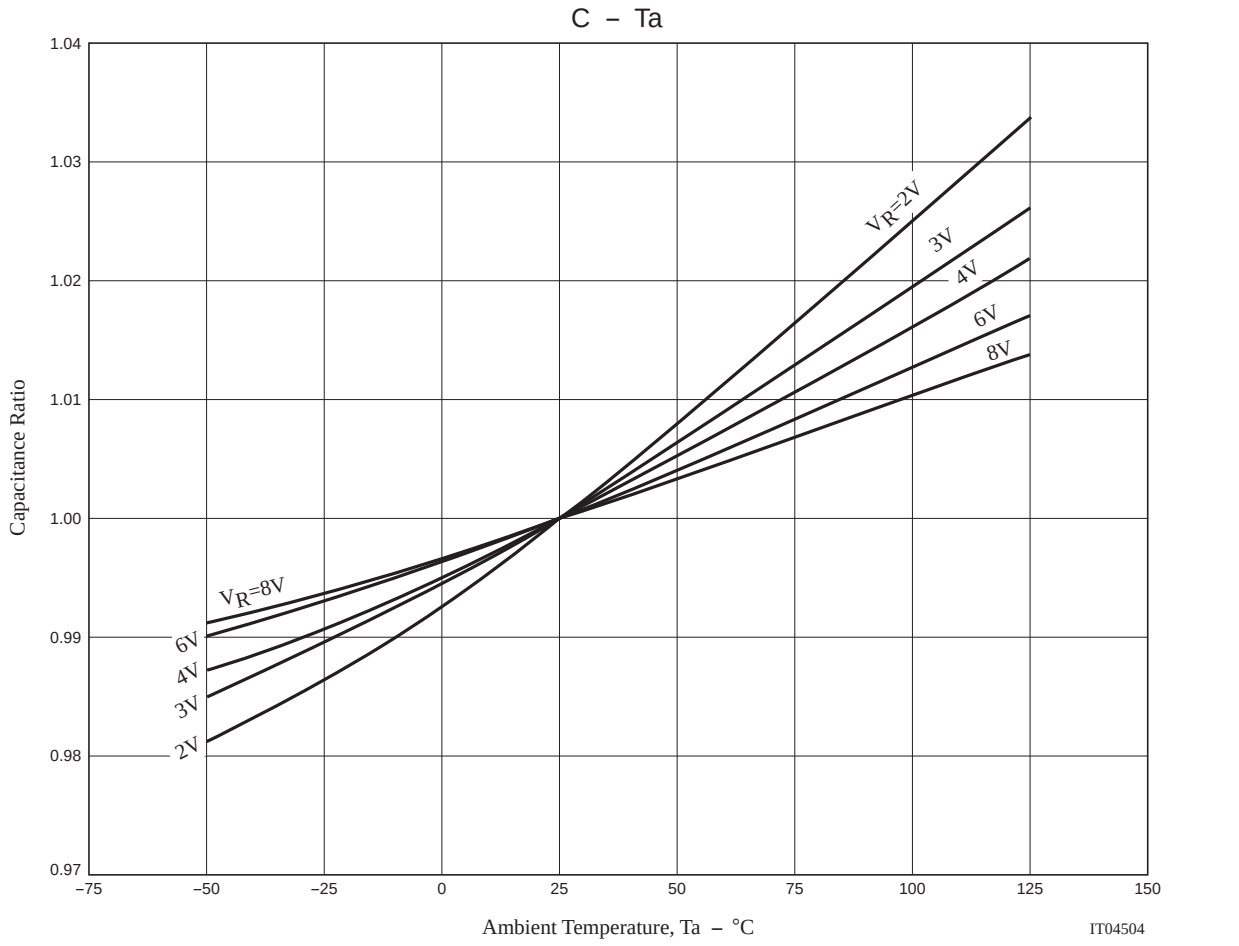
Note) *1 : Capacitance value of one diode

*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





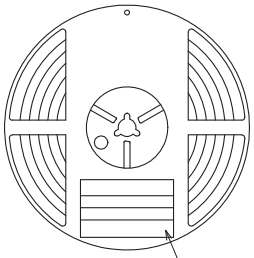
Taping Specification

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

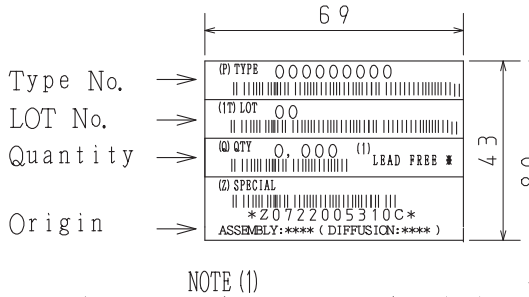
Packing method



Reel label

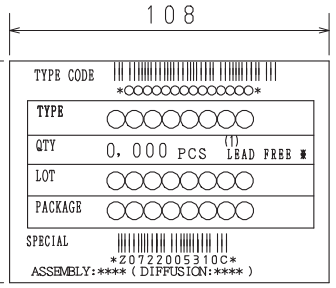
Reel label, Inner box label

(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.



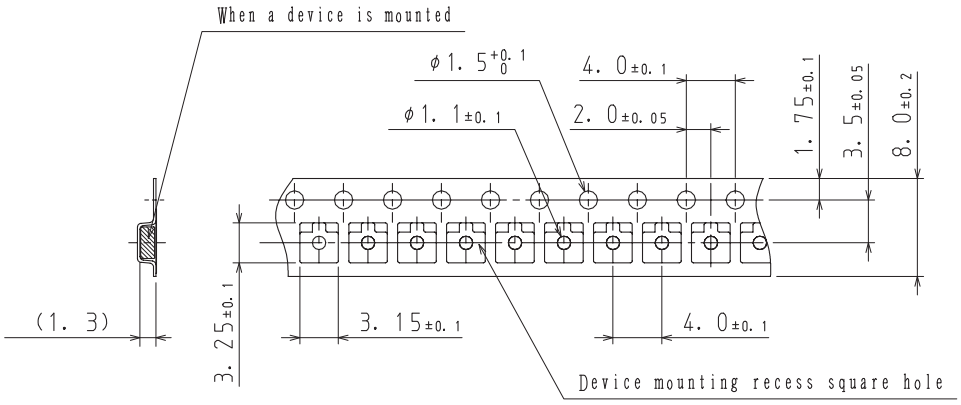
NOTE (1)

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

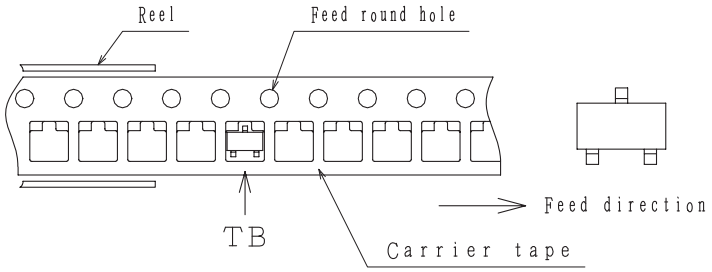
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



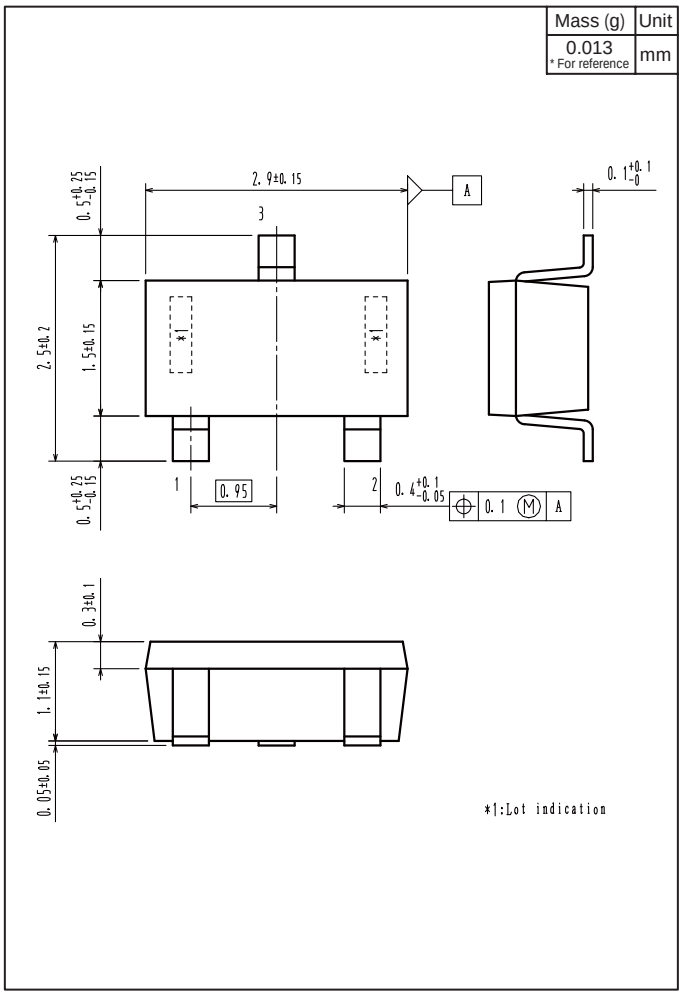
2-2. Device placement direction



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

Outline Drawing

SVC230-TB-E



Land Pattern Example