



# SBX201C

## Schottky Barrier Diode

Dual Series Schottky Barrier Diode for Mixer and Detector  
2V, 50mA, 0.25pF, CP

ON Semiconductor®

<http://onsemi.com>

### Features

- Small interterminal capacitance ( $C=0.25\text{pF}$  typ)
- Less parasitic components
- Small forward voltage
- Series connection of 2 elements in a small-sized package facilitates high density mounting this goods-applied equipment to be made smaller

### Specifications

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

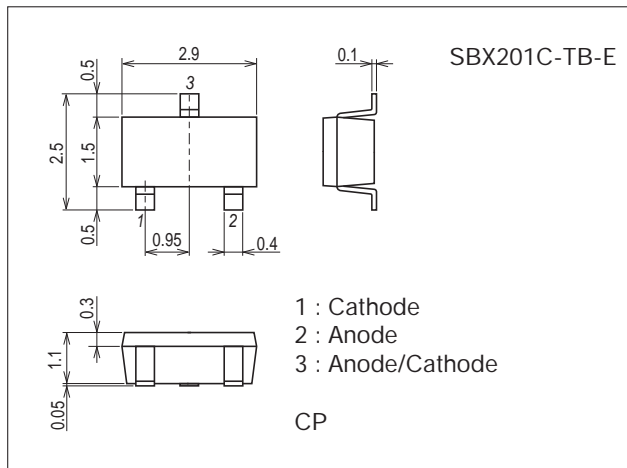
Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		2	V
Forward Current	$I_F$		50	mA
Junction Temperature	$T_j$		150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ\text{C}$

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)

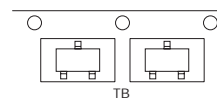
7013A-015



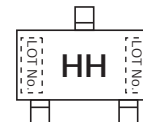
### Product & Package Information

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

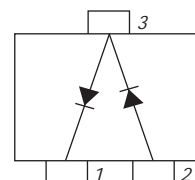
### Packing Type: TB



### Marking



### Electrical Connection



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## Electrical Characteristics at $T_a=25^\circ\text{C}$

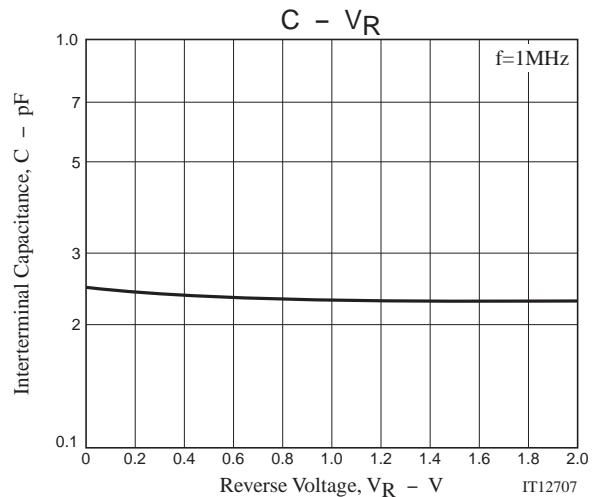
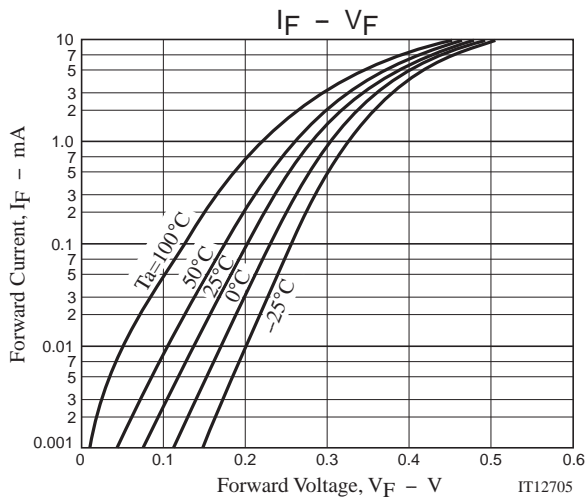
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=10\mu\text{A}$	2			V
Forward Voltage	$V_F$	$I_F=1\text{mA}$			320	mV
Series Resistance	$R_S$	$I_F=10\text{mA}$		14	18	$\Omega$
Interterminal Capacitance	C	$V_R=0\text{V}, f=1\text{MHz}$		0.25	0.28	pF

Note 1) The specifications shown above for each individual diode.

Note 2) Pay attention to handling since it is liable to be affected by static electricity due to the high-frequency process adopted.

## Ordering Information

Device	Package	Shipping	memo
SBX201C-TB-E	CP	3,000pcs./reel	Pb Free



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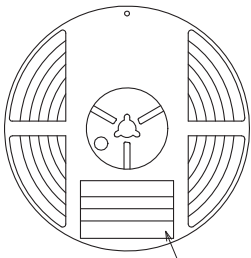
## Embossed Taping Specification

SBX201C-TB-E

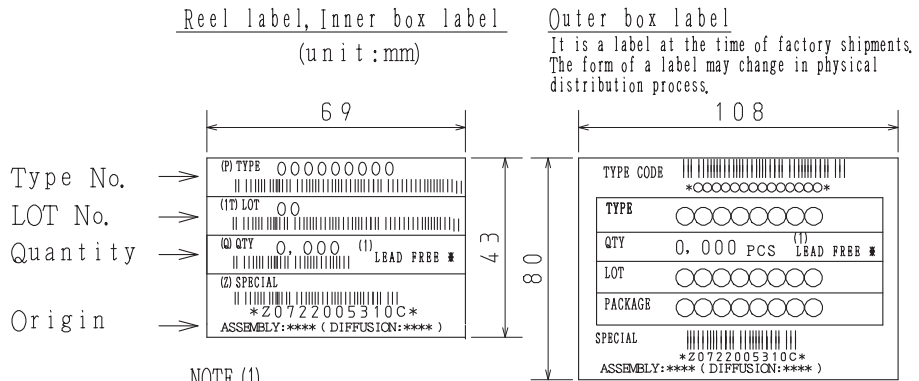
### 1. Packing Format

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



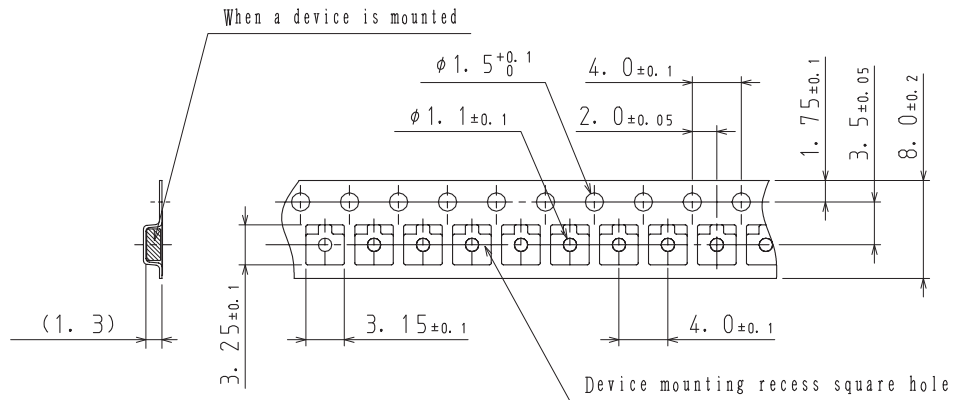
**NOTE (1)**

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

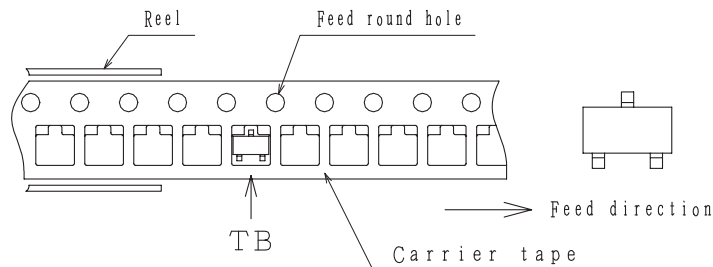
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

### 2. Taping configuration

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



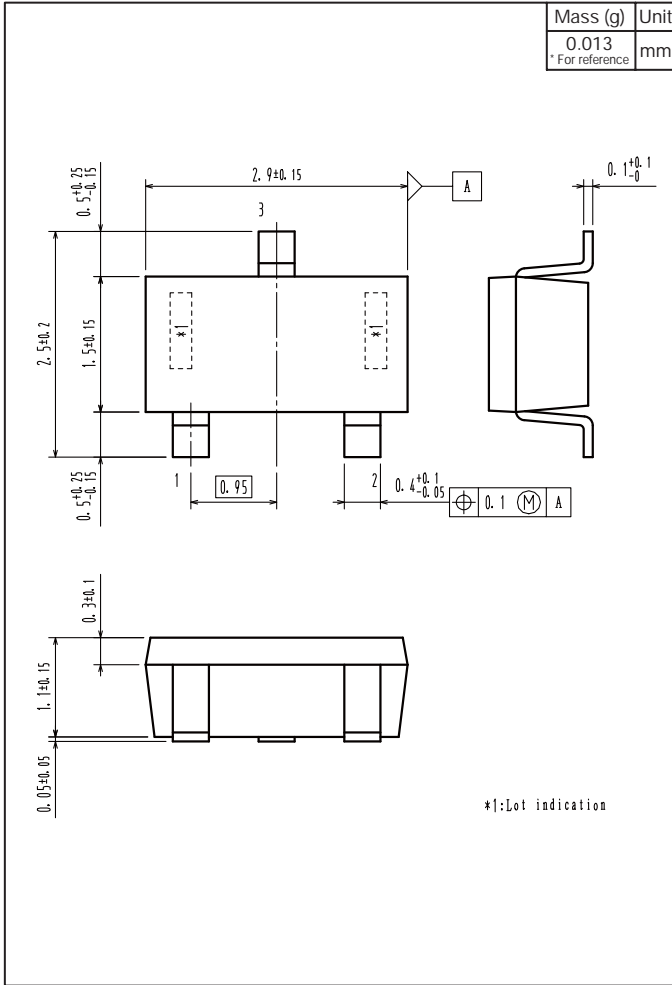
#### 2-2. Device placement direction



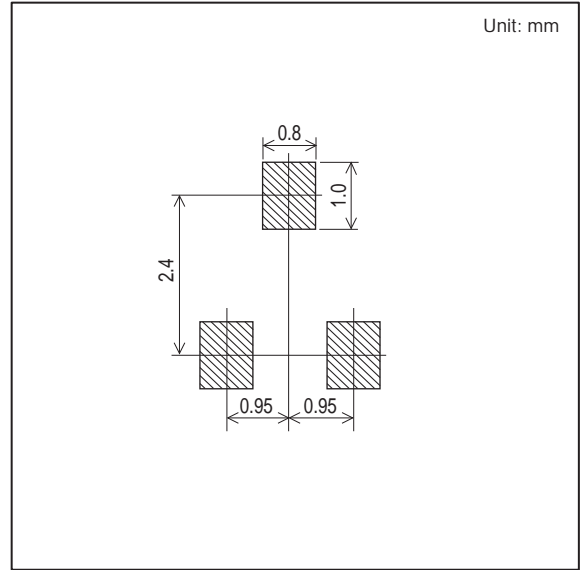
Those with one electrode terminal on the feed hole side.....TB

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## Outline Drawing SBX201C-TB-E



## Land Pattern Example



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