



SANYO Semiconductors

# DATA SHEET

An ON Semiconductor Company

## SB01-15C — Schottky Barrier Diode 150V, 100mA Rectifier

### Applications

- High frequency rectification (switching regulators, converters, choppers)

### Features

- Low forward voltage ( $V_F$  max=0.75V)
- Low switching noise
- Low leakage current and high reliability due to highly reliable planar structure
- Fast reverse recovery time ( $t_{rr}$  max=10ns)

### Specifications

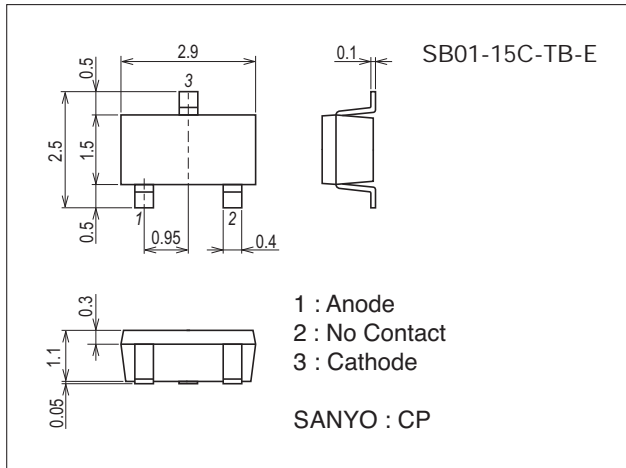
Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		150	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		155	V
Average Output Current	$I_O$		100	mA
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	5	A
Junction Temperature	$T_j$		-55 to +125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

### Package Dimensions

unit : mm (typ)

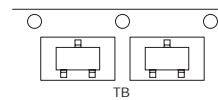
7013A-004



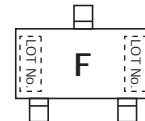
### Product & Package Information

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

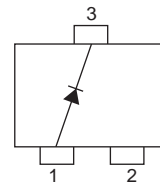
### Packing Type: TB



### Marking



### Electrical Connection

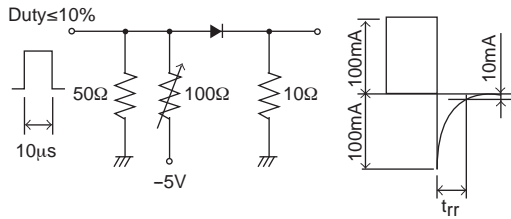


# SB01-15C

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

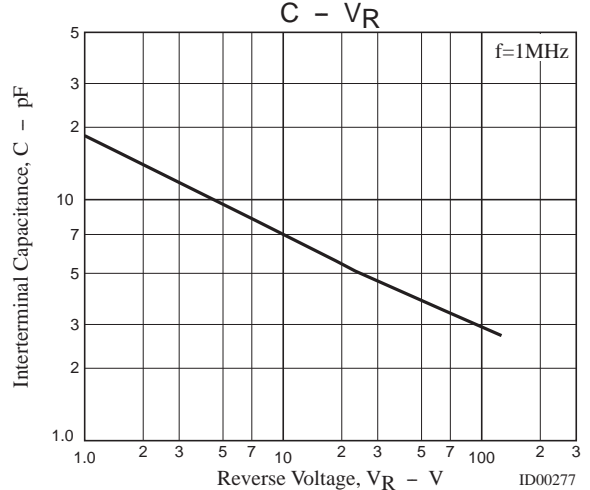
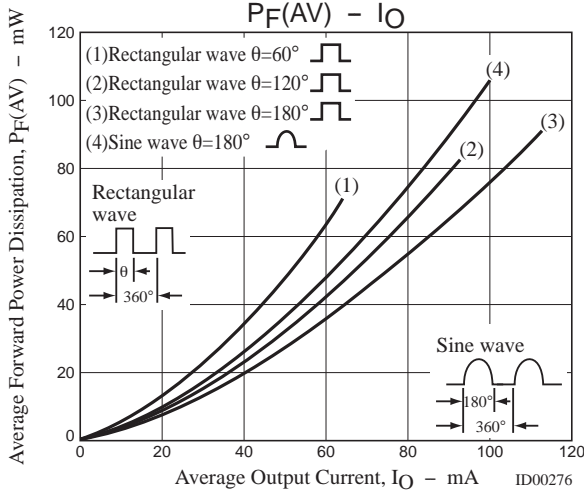
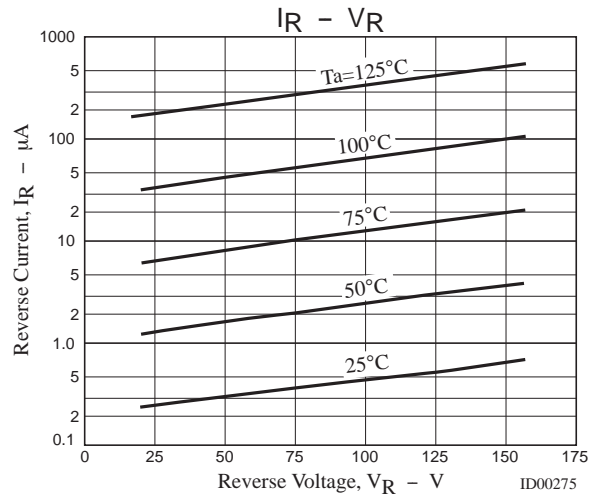
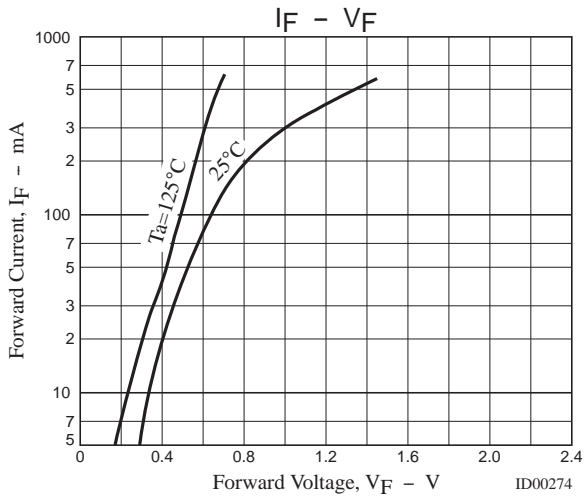
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=200\mu\text{A}$	150			V
Forward Voltage	$V_F$	$I_F=100\text{mA}$			0.75	V
Reverse Current	$I_R$	$V_R=75\text{V}$			50	$\mu\text{A}$
Interterminal Capacitance	C	$V_R=10\text{V}, f=1\text{MHz}$		7		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=100\text{mA}$ , See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)1}$			420		$^\circ\text{C} / \text{W}$
	$R_{th(j-a)2}$	Mounted in Cu-foiled area of $16\text{mm}^2 \times 0.2\text{mm}$ on glass epoxy board		330		$^\circ\text{C} / \text{W}$

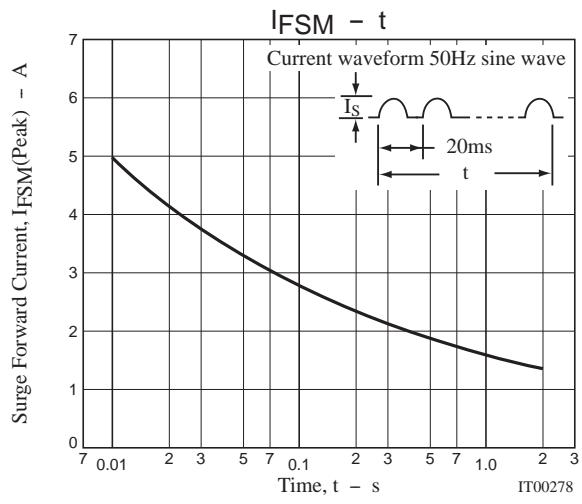
### $t_{rr}$ Test Circuit



### Ordering Information

Device	Package	Shipping	memo
SB01-15C-TB-E	CP	3,000pcs./reel	Pb Free





# SB01-15C

## Embossed Taping Specification

SB01-15C-TB-E

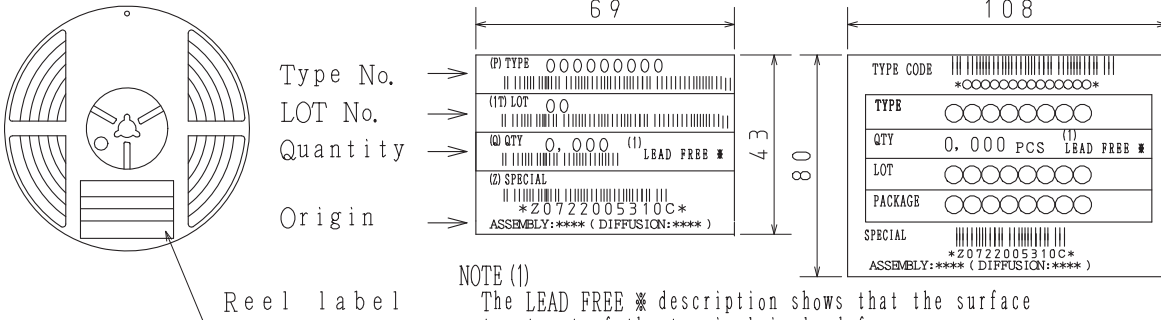
### 1. Packing Format

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
Outer box label

(unit:mm)
It is a label at the time of factory shipments. The form of a label may change in physical distribution process.

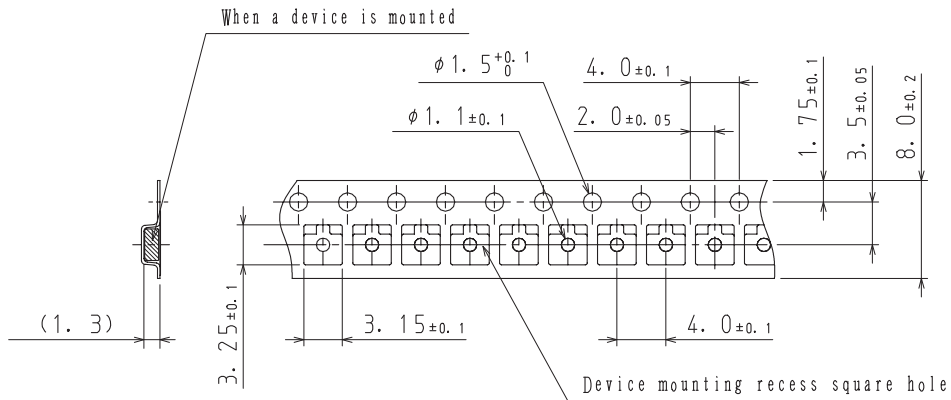
#### Packing method



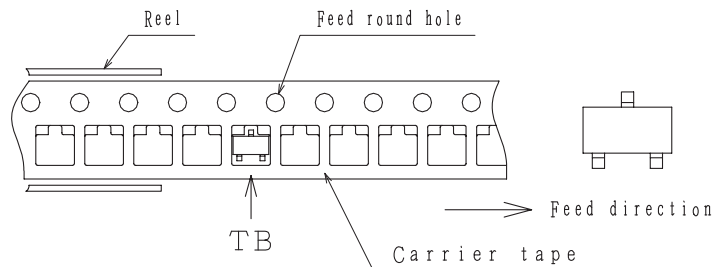
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

### 2. Taping configuration

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



#### 2-2. Device placement direction

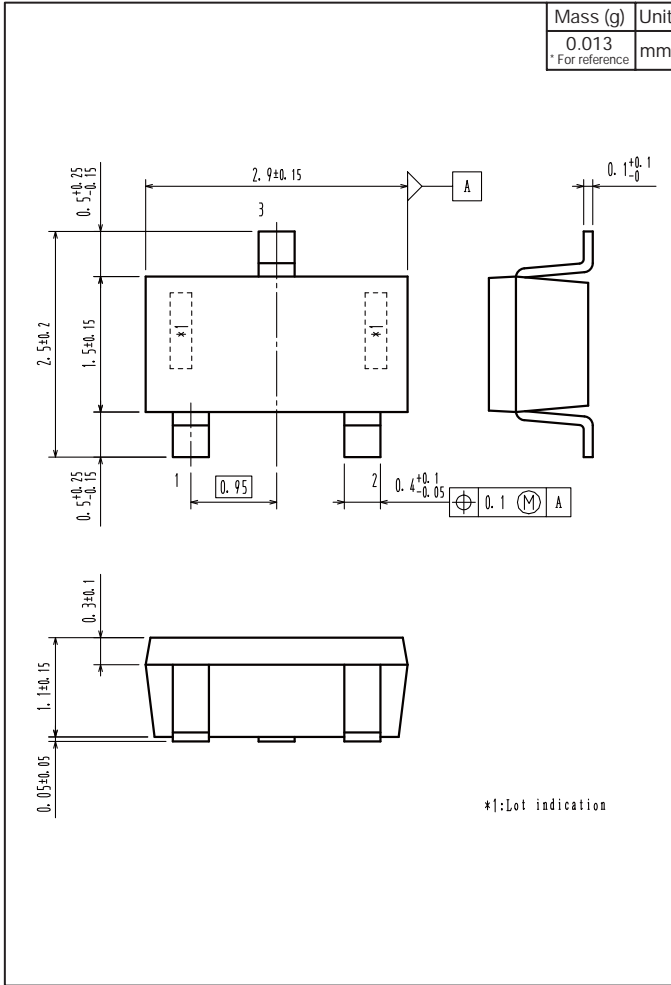


Those with one electrode terminal on the feed hole side.....TB

# SB01-15C

## Outline Drawing

SB01-15C-TB-E



## Land Pattern Example



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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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