



SANYO Semiconductors

# DATA SHEET

An ON Semiconductor Company

## SBS811 — Schottky Barrier Diode 30V, 2.0A Rectifier

### Applications

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

### Features

- Small Switching noise
- Low forward voltage ( $I_F=2A$ ,  $V_F \text{ max}=0.40V$ )

### Specifications

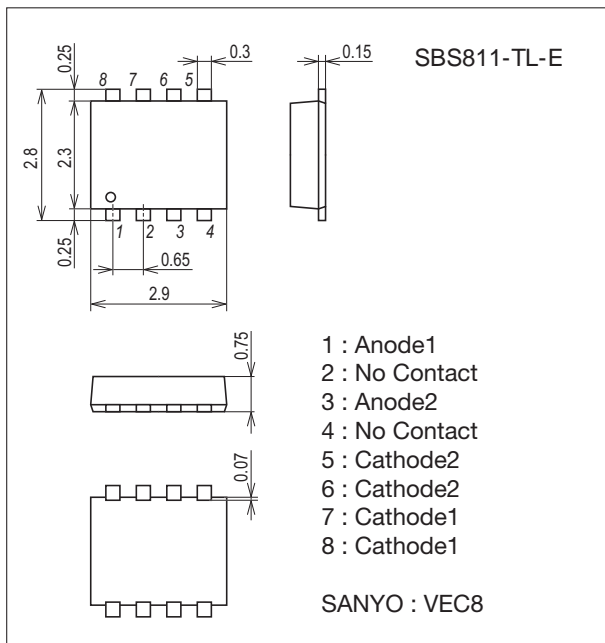
**Absolute Maximum Ratings** at  $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		30	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		30	V
Average Output Current	$I_O$		2.0	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	10	A
Junction Temperature	$T_j$		-55 to +125	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ C$

### Package Dimensions

unit : mm (typ)

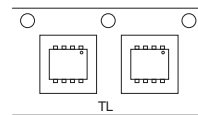
7012-001



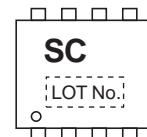
### Product & Package Information

- Package : VEC8
- JEITA, JEDEC : -
- Minimum Packing Quantity : 3,000 pcs./reel

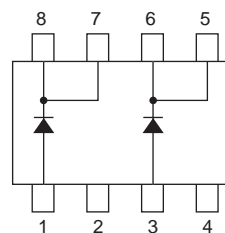
### Packing Type : TL



### Marking



### Electrical Connection

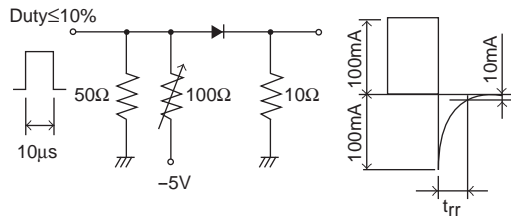


# SBS811

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

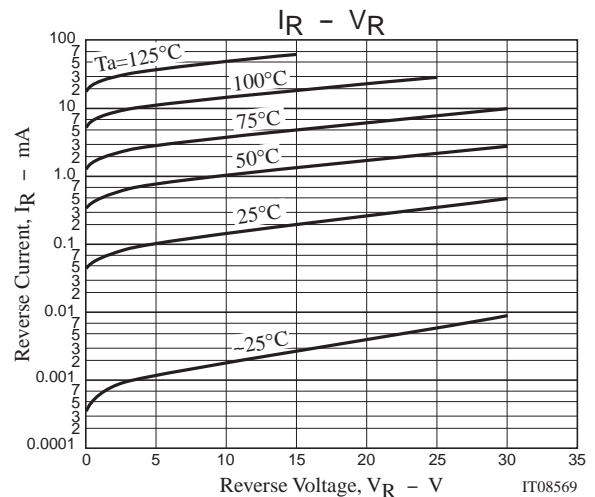
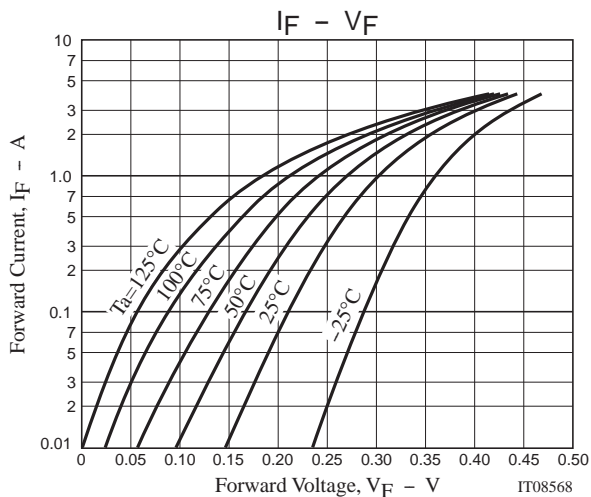
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=2.0\text{mA}$	30			V
Forward Voltage	$V_F$	$I_F=1.0\text{A}$		0.30	0.35	V
		$I_F=2.0\text{A}$		0.35	0.40	V
Reverse Current	$I_R$	$V_R=15\text{V}$			1.25	mA
Interterminal Capacitance	C	$V_R=10\text{V}$ , $f=1\text{MHz}$		75		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=100\text{mA}$ , See specified Test Circuit.			20	ns
Thermal Resistance	$R_{th(j-a)1}$	When Mounted in Cu-foiled area of $1.92\text{mm}^2 \times 0.03\text{mm}$ on glass epoxy substrate		75		$^\circ\text{C} / \text{W}$
	$R_{th(j-a)2}$	When mounted on ceramic substrate ( $1000\text{mm}^2 \times 0.8\text{mm}$ )		70		$^\circ\text{C} / \text{W}$

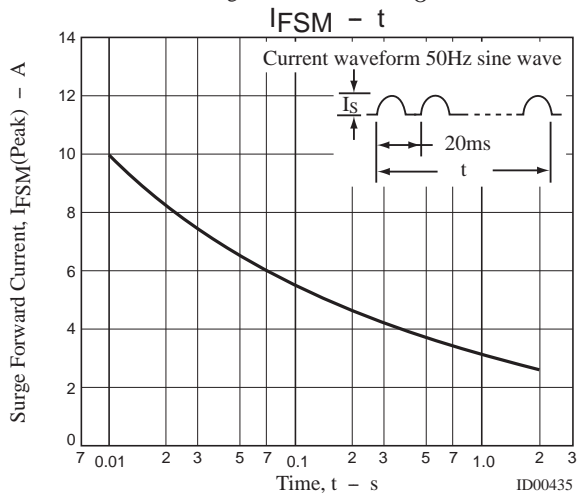
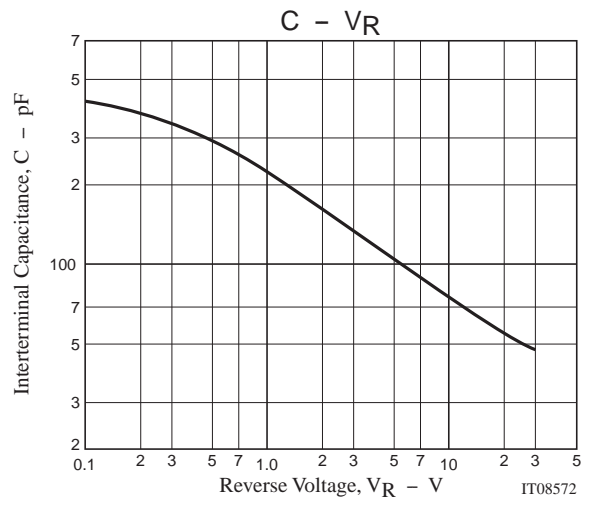
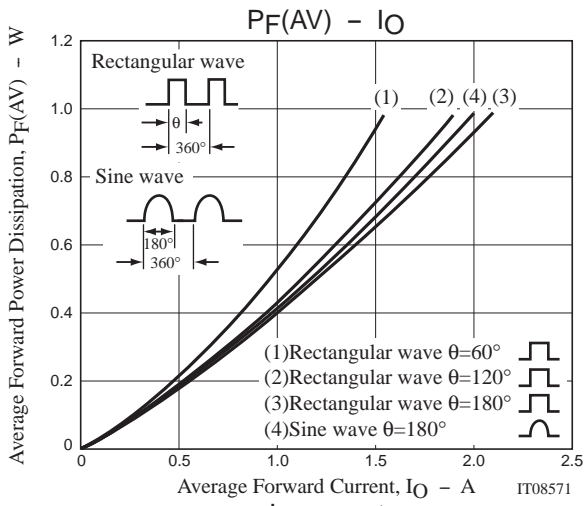
### $t_{rr}$ Test Circuit



### Ordering Information

Device	Package	Shipping	memo
SBS811-TL-E	VEC8	3,000pcs./reel	Pb Free





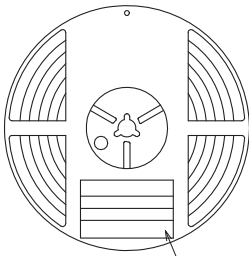
Taping Specification

SBS811-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)
VEC8	CPH6	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

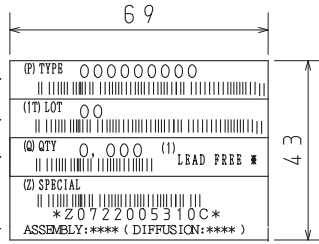
Packing method



Reel label

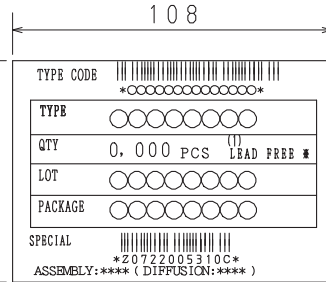
Type No.  
LOT No.  
Quantity  
Origin

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.



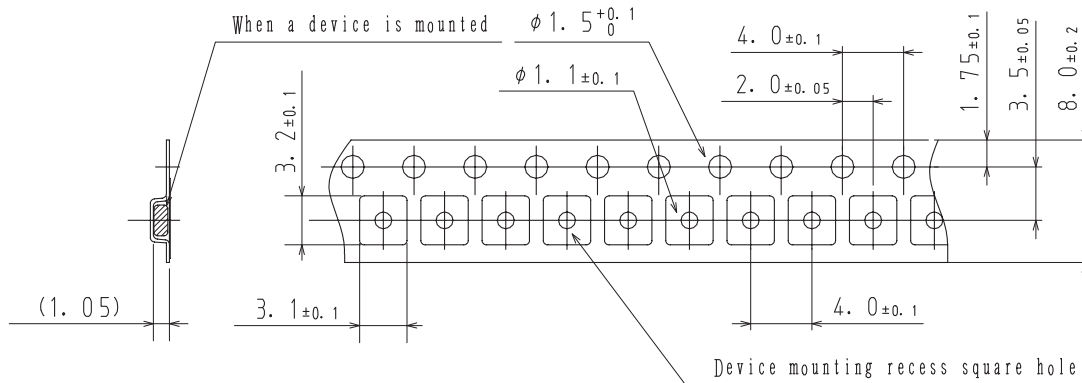
NOTE (1)

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

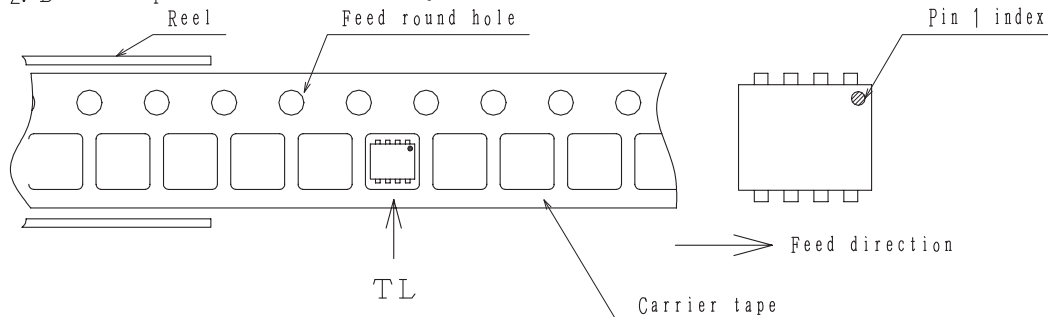
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

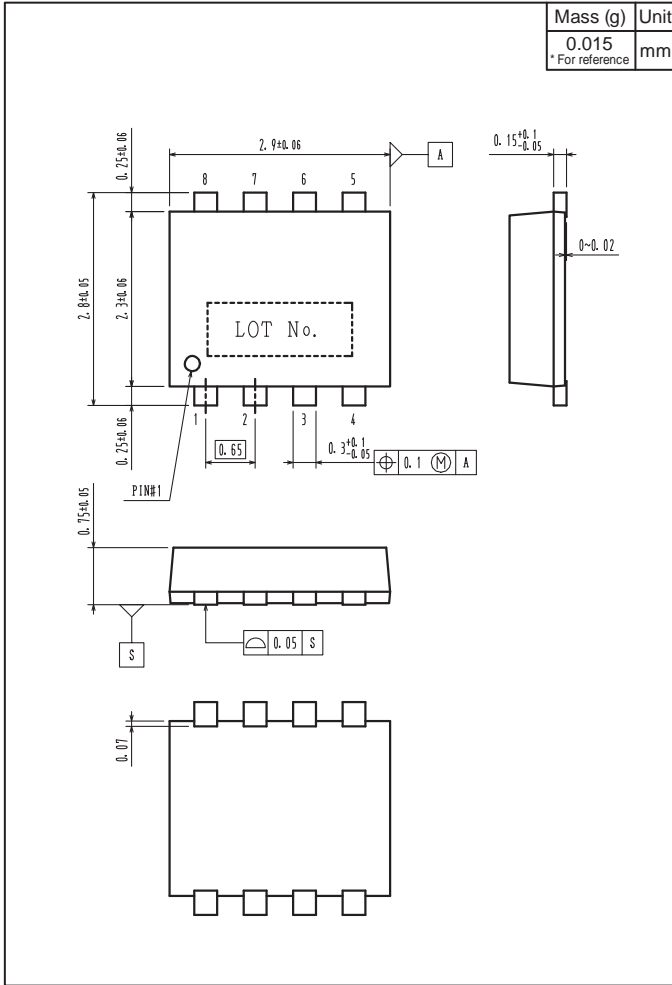


Those with oen electrode terminal on the feed hole side.....TL

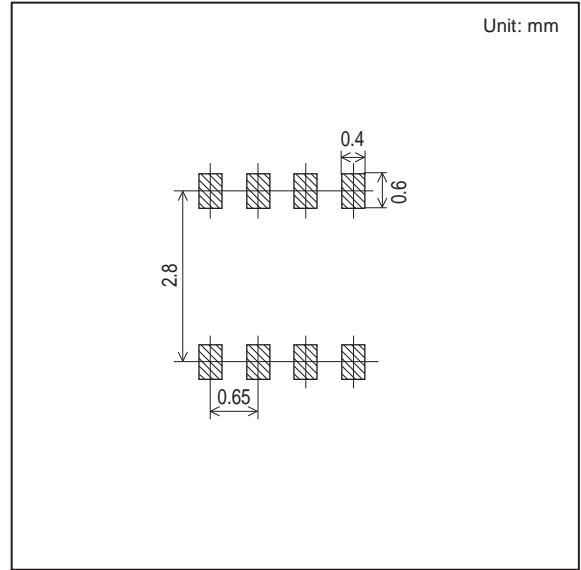
# SBS811

## Outline Drawing

SBS811-TL-E



## Land Pattern Example



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