



# SB80W06T — Schottky Barrier Diode (Twin Type • Cathode Common) 60V, 8A Rectifier

## Applications

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

## Features

- Low forward voltage ( $V_F$  max=0.6V)
- Low switching noise
- Halogen free compliance
- Fast reverse recovery time
- High reliability due to highly reliable planar structure

## Specifications

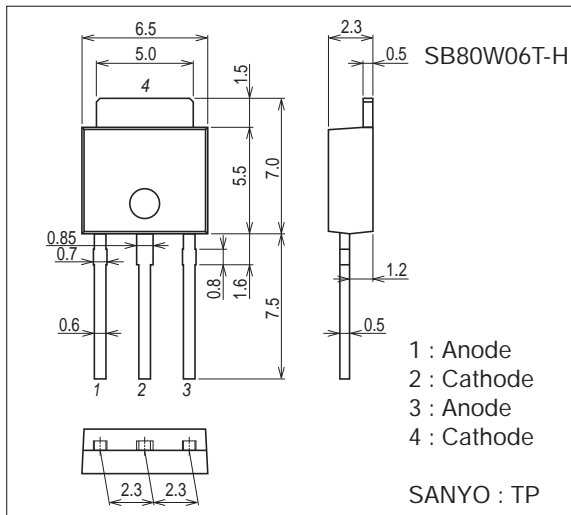
Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		60	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		66	V

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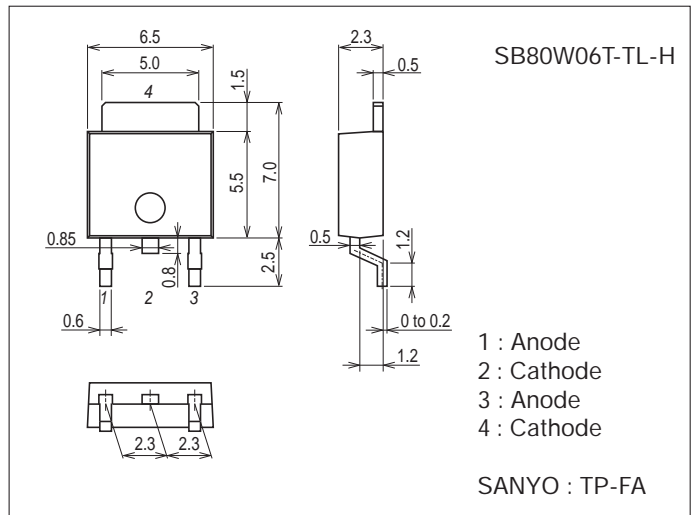
## Package Dimensions

unit : mm (typ)  
7518-001



## Package Dimensions

unit : mm (typ)  
7003-002

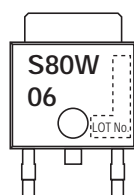


## Product & Package Information

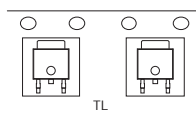
- Package : TP
- JEITA, JEDEC : SC-64, TO-251, SOT-553, DPAK
- Minimum Packing Quantity : 500 pcs./bag

- Package : TP-FA
- JEITA, JEDEC : SC-63, TO-252, SOT-428, DPAK
- Minimum Packing Quantity : 700 pcs./reel

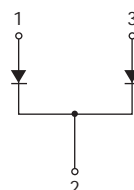
## Marking (TP, TP-FA)



## Packing Type (TP-FA) : TL



## Electrical Connection



# SB80W06T

Continued from preceding page.

Parameter	Symbol	Conditions	Ratings	Unit
Average Output Current	$I_O^*2$	50Hz resistive load, sine wave $T_c=130^\circ\text{C}$	4	A
	$I_O^*1$	50Hz resistive load, sine wave $T_c=83^\circ\text{C}$	8	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	40	A
Junction Temperature	$T_j$		-55 to +150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ\text{C}$

Note) \*1. Indicates the total value

\*2. Value per element

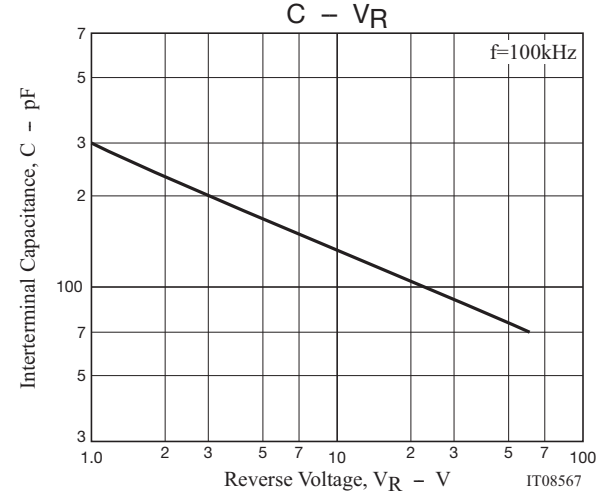
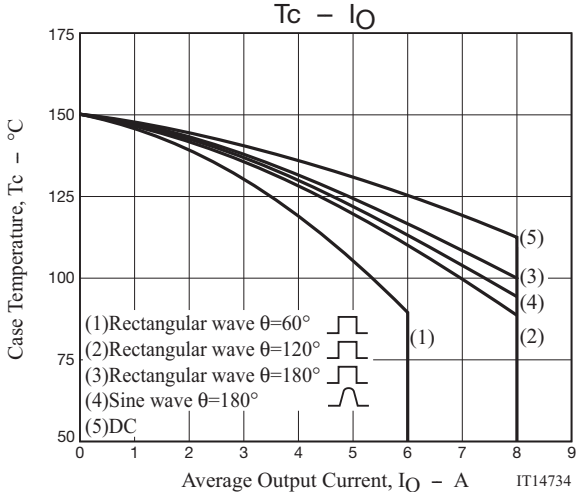
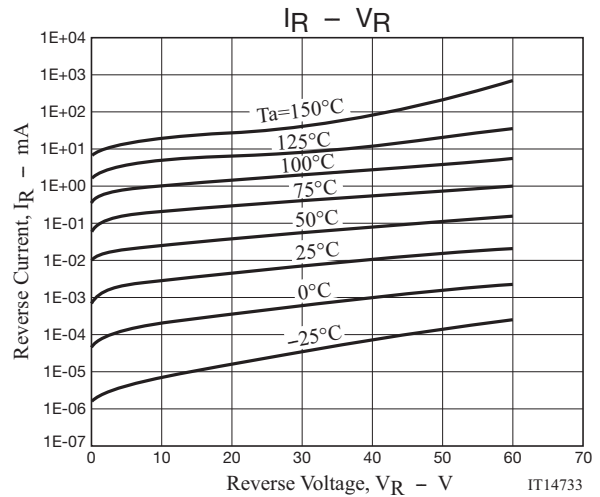
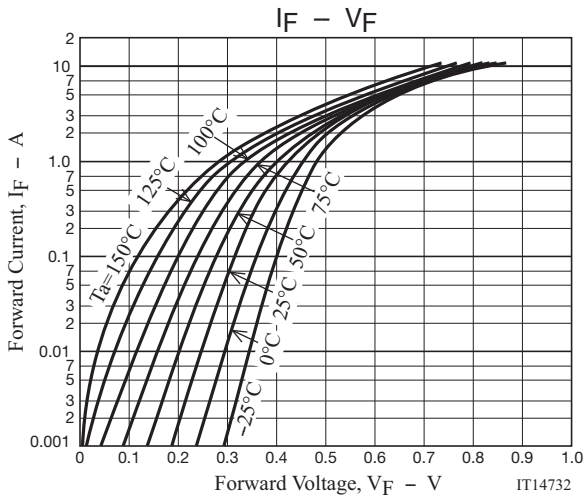
## Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1\text{mA}$ , $T_j=25^\circ\text{C}^*2$	60			V
Forward Voltage	$V_F$	$I_F=3.0\text{A}$ , $T_j=25^\circ\text{C}^*2$			0.6	V
Reverse Current	$I_R$	$V_R=30\text{V}$ , $T_j=25^\circ\text{C}^*2$			0.1	mA
Interterminal Capacitance	C	$V_R=10\text{V}$ , $T_j=25^\circ\text{C}^*2$		130		pF
Transient Thermal Resistance	$R_{th(j-c)}$	Junction-Case : Smoothed DC		6		$^\circ\text{C} / \text{W}$

Note) \*2. Value per element

## Ordering Information

Device	Package	Shipping	memo
SB80W06T-H	TP	500pcs./bag	Pb Free and Halogen Free
SB80W06T-TL-H	TP-FA	700pcs./reel	



# SB80W06T

## Taping Specification

SB80W06T-TL-H

### Packing Format

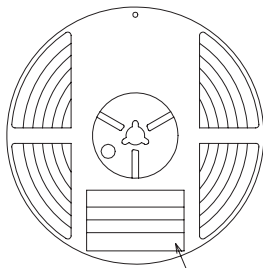
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
TP-FA	TP	700	2,100	12,600	3 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Reel label, Inner box label  
(unit:mm)

Outer box label

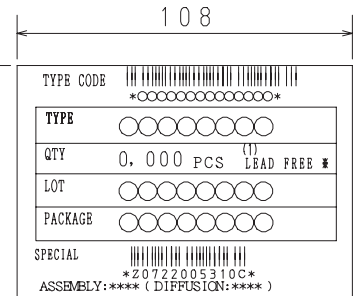
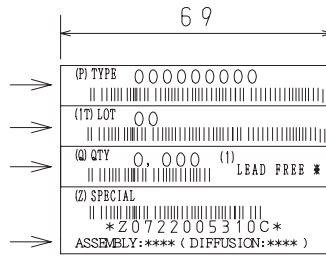
It is a label at the time of factory shipments.  
The form of a label may change in physical distribution process.

### Packing method



Reel label

Type No.  
LOT No.  
Quantity  
Origin



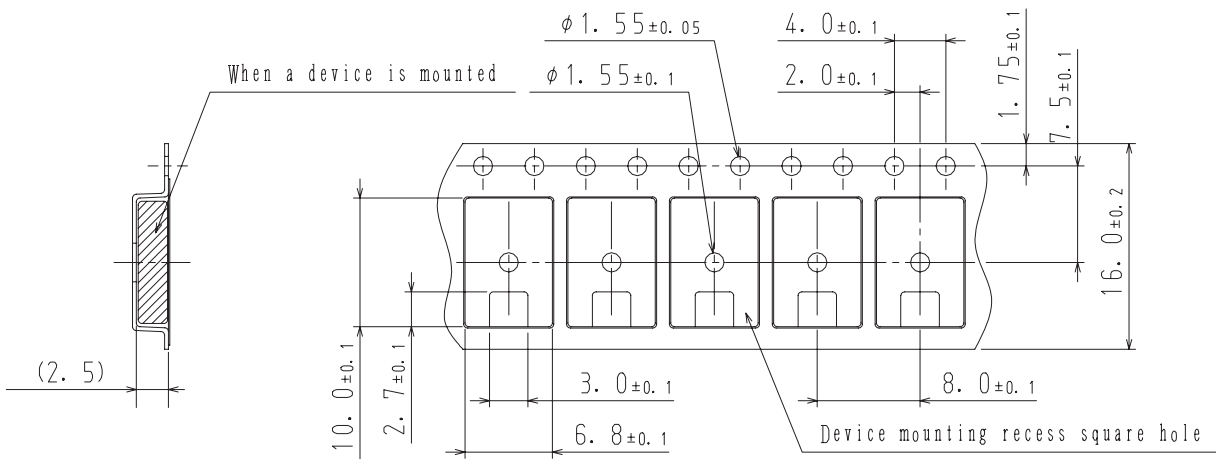
**NOTE (1)**

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

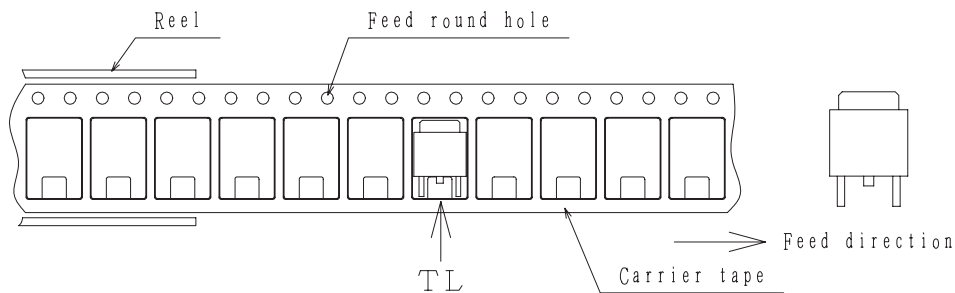
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

### Taping configuration

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



#### 2. Device placement direction

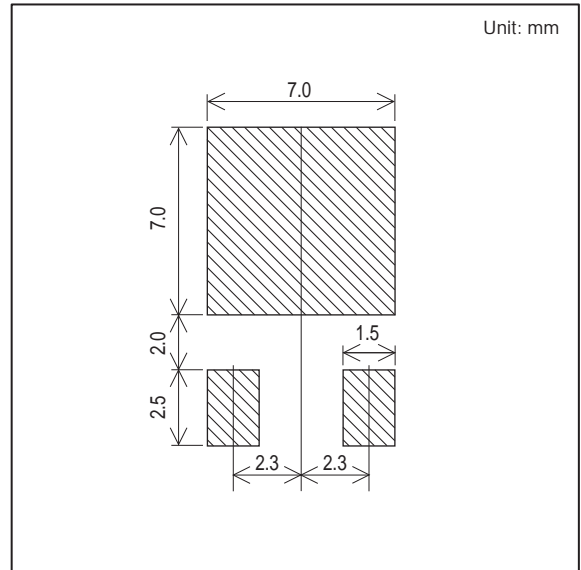
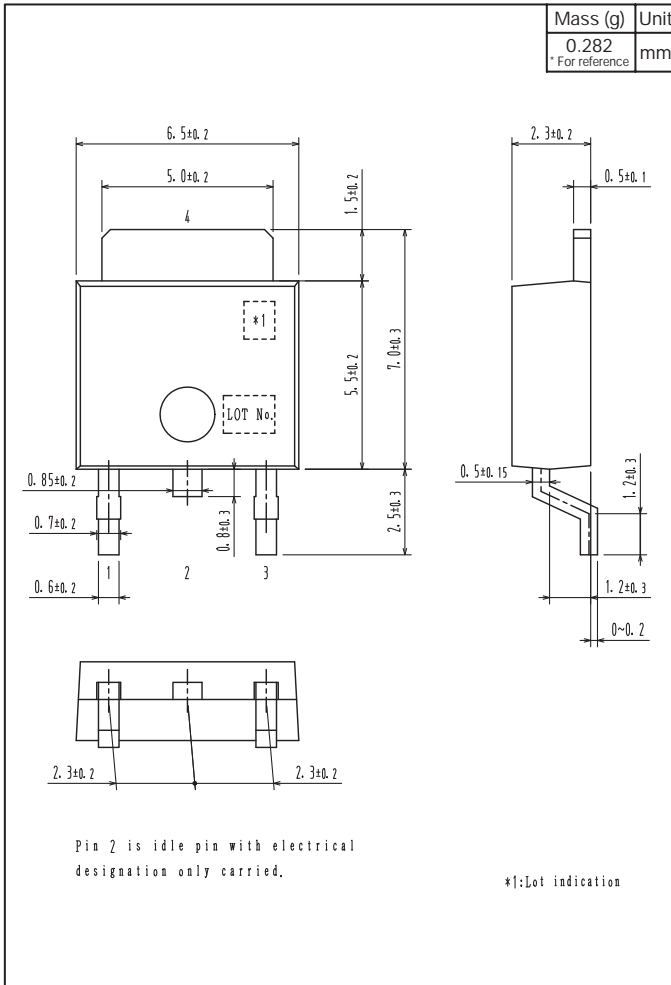


Those with one electrode terminal on the feed hole side.....TL

# SB80W06T

## Outline Drawing SB80W06T-TL-H

## Land Pattern Example





# SB80W06T

## Outline Drawing

SB80W06T-H



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