



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

Applications

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

Features

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

Specifications

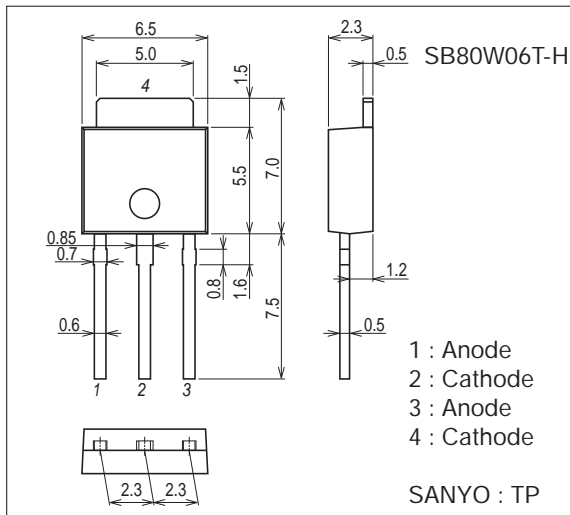
Absolute Maximum Ratings at $T_a = 25^\circ C$

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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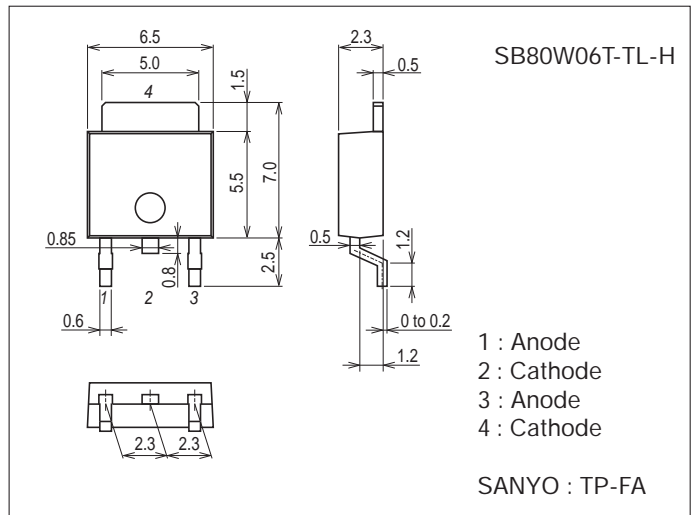
Package Dimensions

unit : mm (typ)
7518-001



Package Dimensions

unit : mm (typ)
7003-002

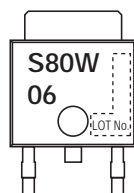


Product & Package Information

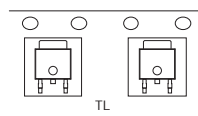
- Package : TP
- JEITA, JEDEC : SC-64, TO-251, SOT-553, DPAK
- Minimum Packing Quantity : 500 pcs./bag

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

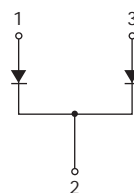
Marking (TP, TP-FA)



Packing Type (TP-FA) : TL



Electrical Connection



SB80W06T

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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

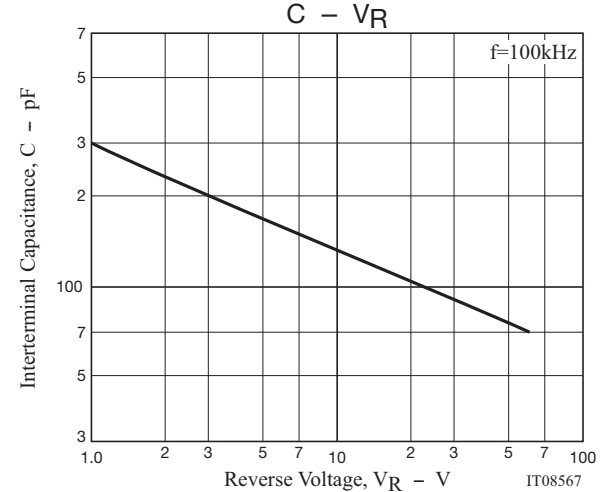
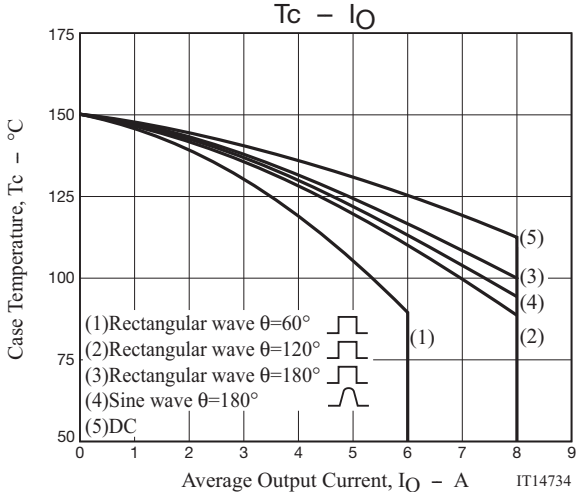
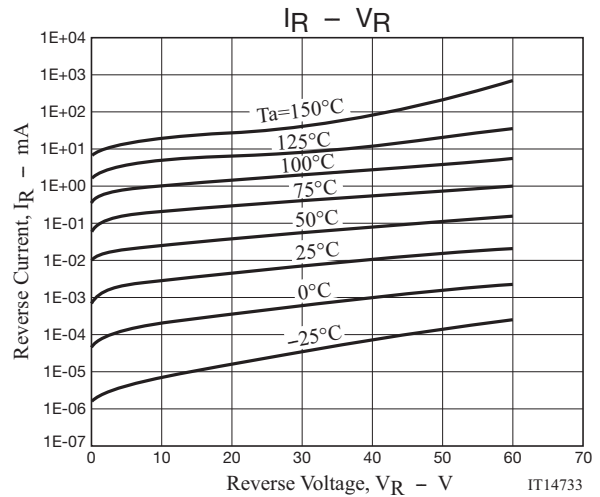
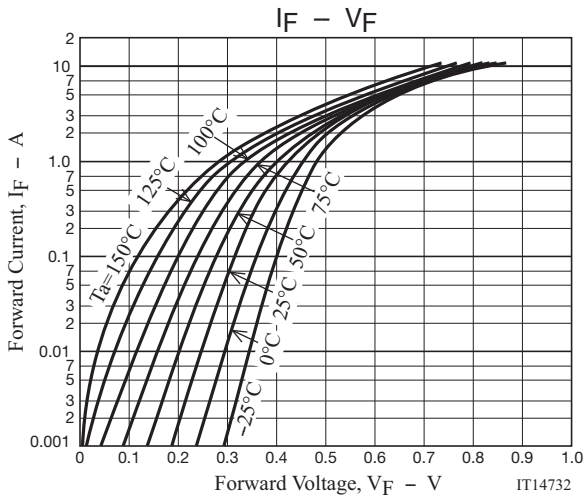
Electrical Characteristics at $T_a=25^\circ\text{C}$

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	



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Taping Specification

SB80W06T-TL-H

Packing Format

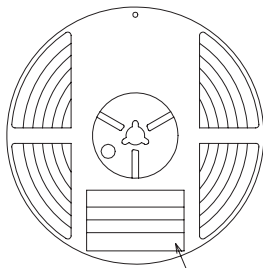
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
TP-FA	TP	700	2,100	12,600	3 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Reel label, Inner box label
(unit:mm)

Outer box label

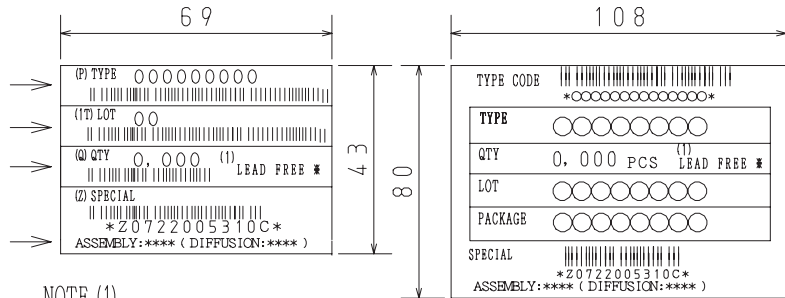
It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.

Packing method



Reel label

Type No.
LOT No.
Quantity
Origin



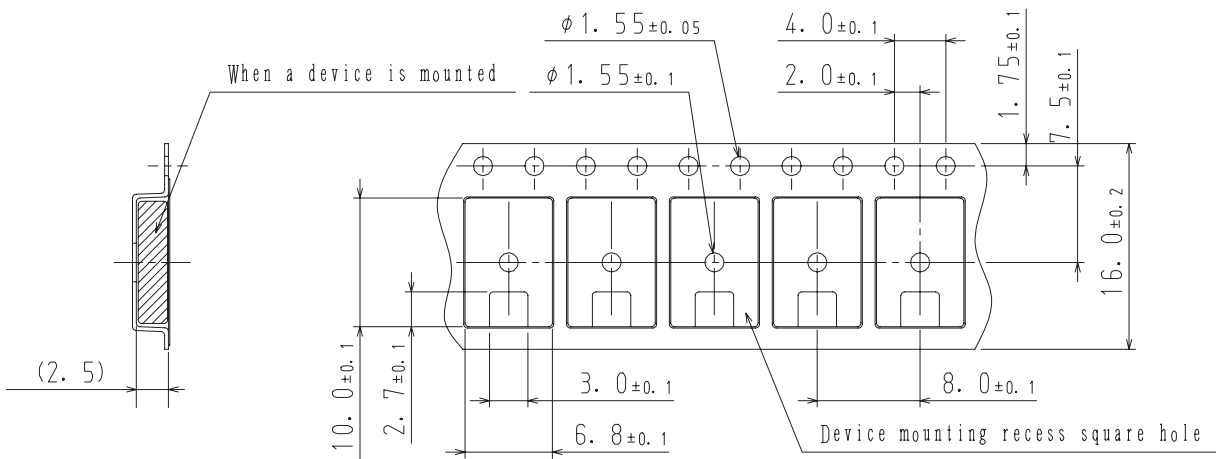
NOTE (1)

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

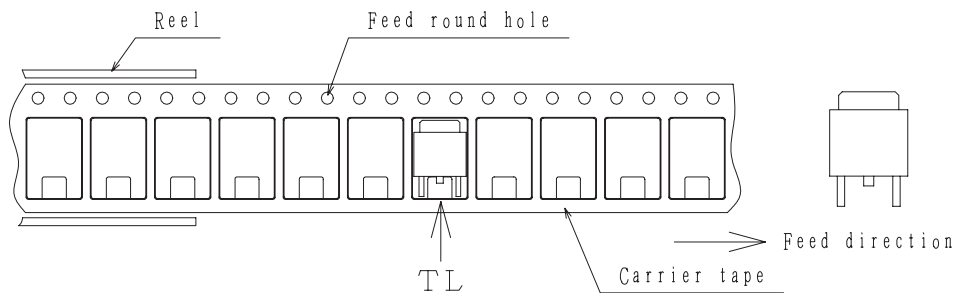
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

Taping configuration

1. Carrier tape size (unit:mm)



2. Device placement direction

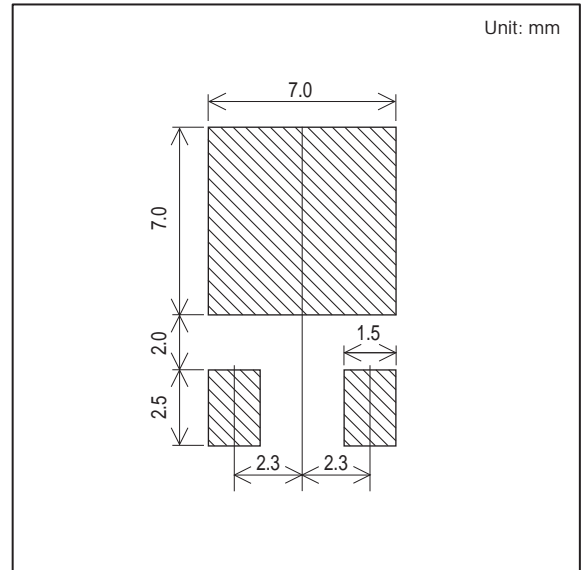
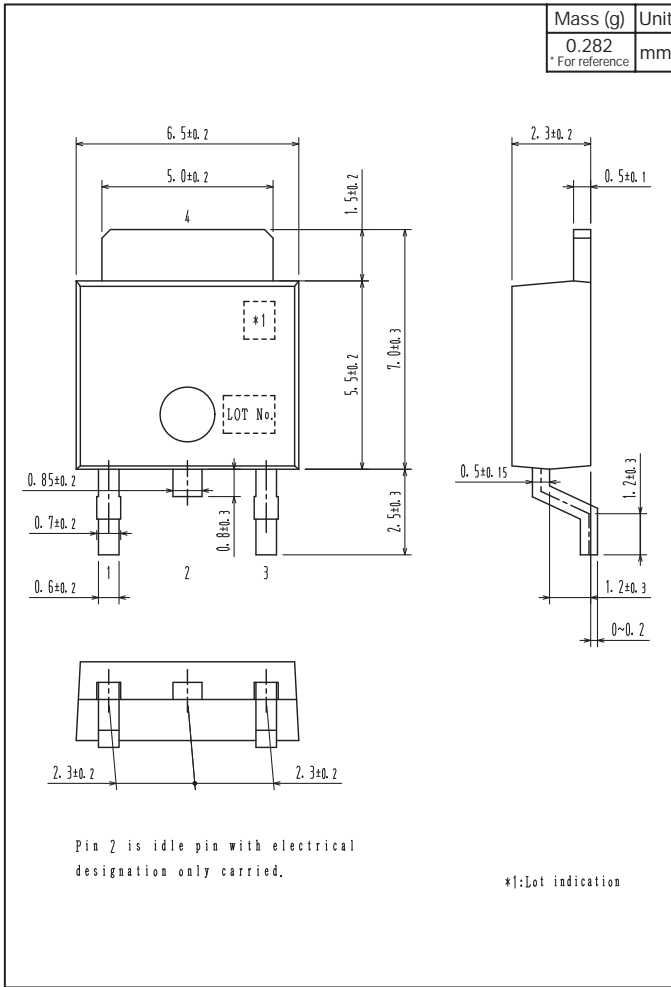


Those with one electrode terminal on the feed hole side.....TL

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Outline Drawing SB80W06T-TL-H

Land Pattern Example



SB80W06T

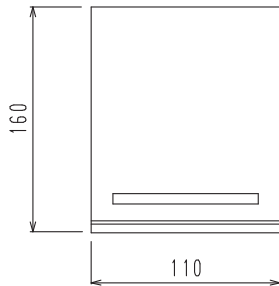
Bag Packing Specification

SB80W06T-H

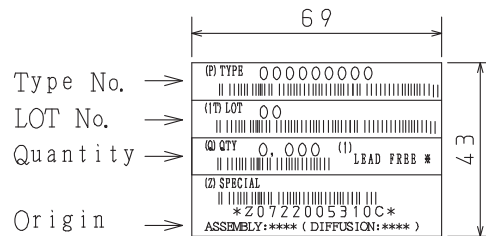
1. Packing Format

Package Name	Maximum Number of devices contained (pcs)			
	Bag	Inner box	Outer box	
TP	500	B-1	A-1	A-2
		10,000	50,000	30,000
		Packing format (Dimensions:mm (external))		
		Inner box	Outer box	
		B-1	A-1	A-2
		445×225×55	470×250×300	470×250×190

2. Bag dimensions (unit:mm)



3. Bag label, Inner box label (unit:mm)



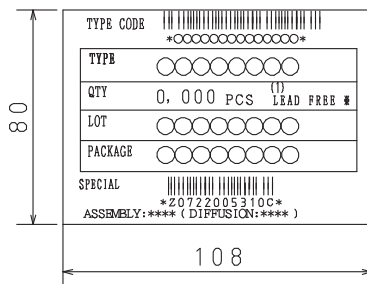
4. Outer box label (unit:mm)

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

NOTE (1)

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

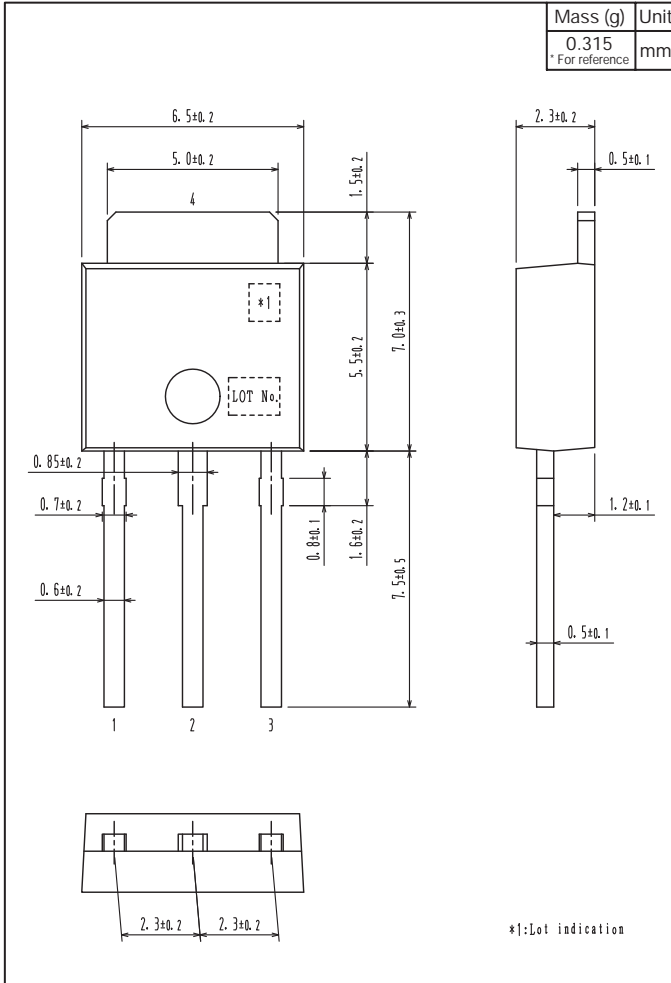
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3



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Outline Drawing

SB80W06T-H



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