



SBE807 — Schottky Barrier Diode

30V, 1.0A Rectifier

Applications

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

Features

- Low switching noise
- Low reverse current ($V_R=16V$, $I_R \text{ max}=15\mu A$)

Specifications

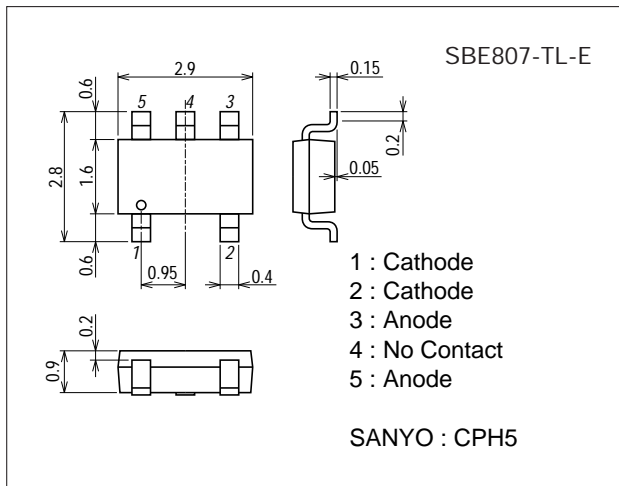
Absolute Maximum Ratings at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O		1.0	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)

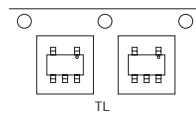
7017A-001



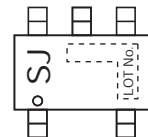
Product & Package Information

- Package : CPH5
- JEITA, JEDEC : SC-74A, SOT-25
- Minimum Packing Quantity : 3,000 pcs./reel

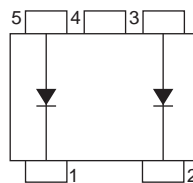
Packing Type : TL



Marking



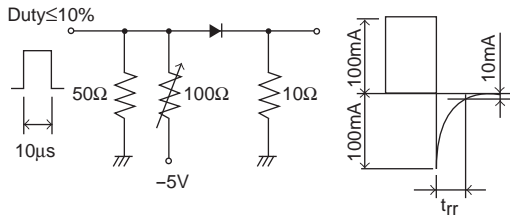
Electrical Connection



Electrical Characteristics at Ta=25°C

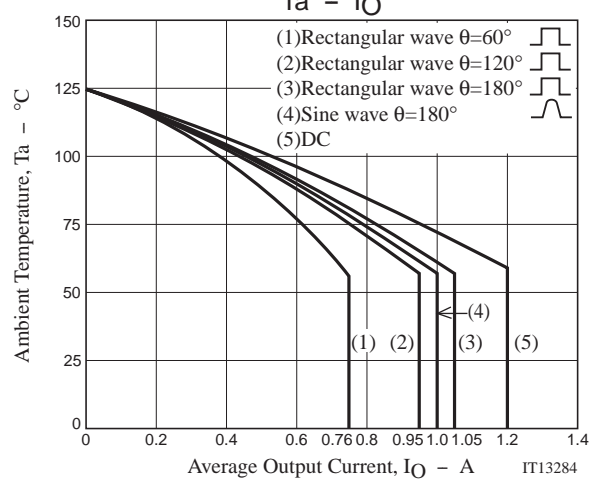
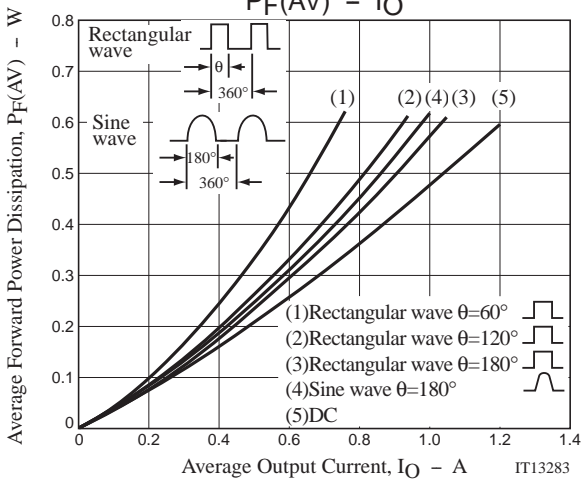
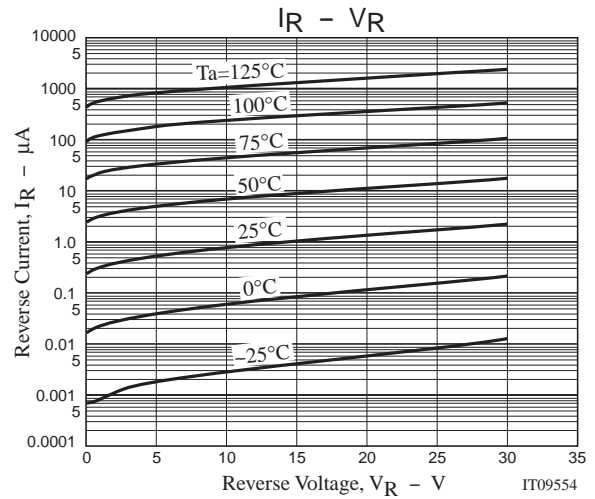
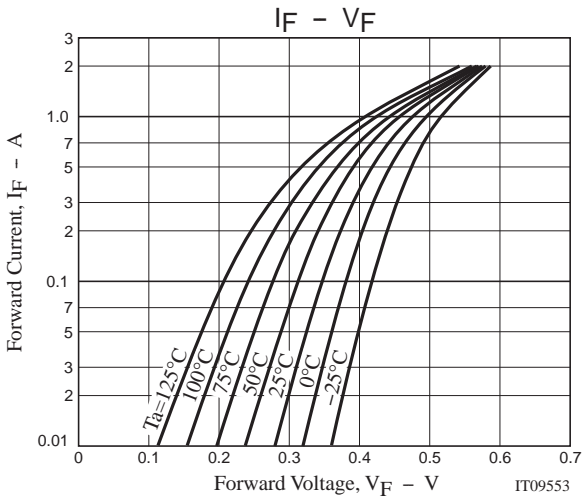
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V _R	I _R =0.2mA	30			V
Forward Voltage	V _{F1}	I _F =0.7A		0.45	0.50	V
	V _{F2}	I _F =1.0A		0.48	0.53	V
Reverse Current	I _R	V _R =16V			15	μA
Interterminal Capacitance	C	V _R =10V, f=1MHz		27		pF
Reverse Recovery Time	t _{rr}	I _F =I _R =100mA, See specified Test Circuit.			10	ns
Thermal Resistance	R _{th(j-a)}	When mounted on ceramic substrate (900mm ² ×0.8mm)		111		°C / W

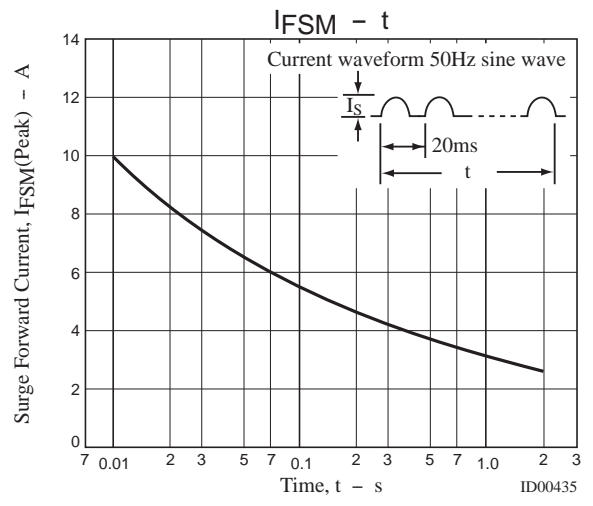
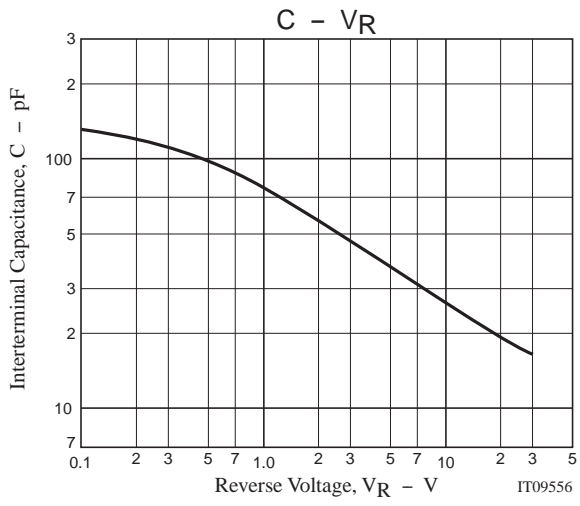
t_{rr} Test Circuit



Ordering Information

Device	Package	Shipping	memo
SBE807-TL-E	CPH5	3,000pcs./reel	Pb Free





Embossed Taping Specification

SBE807-TL-E

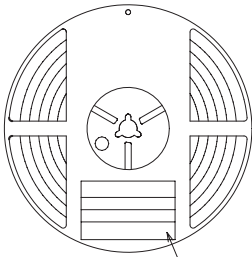
1. Packing Format

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)
CPH5	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

Reel label, Inner box label
(unit :mm)

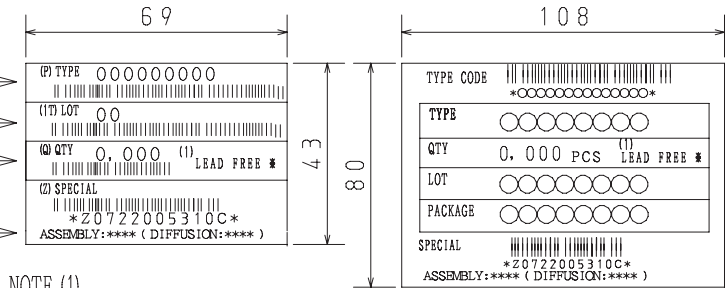
Outer box label
It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.

Packing method



Type No.
LOT No.
Quantity
Origin

Reel label



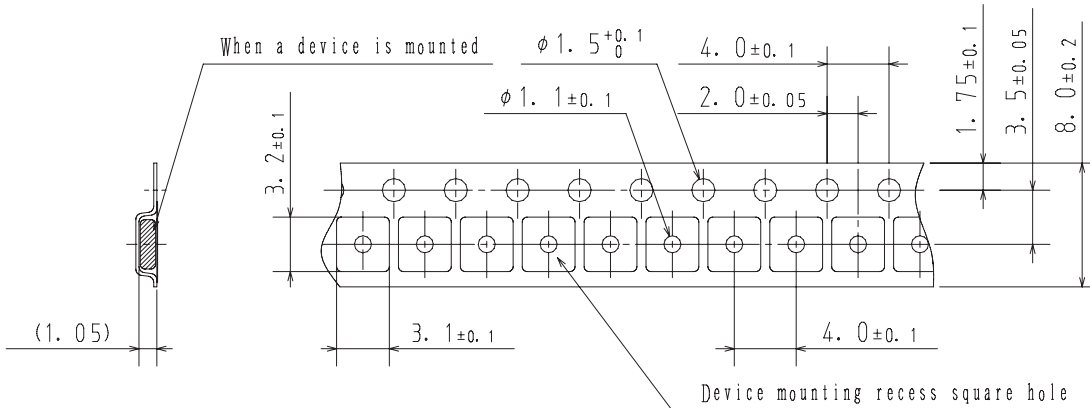
NOTE (1)

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

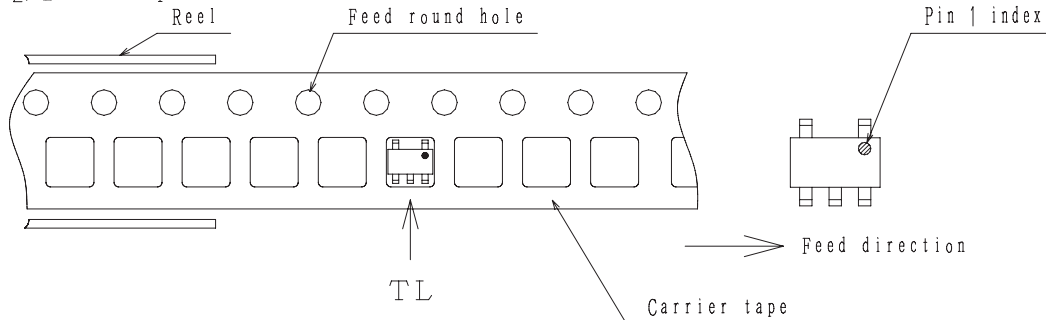
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



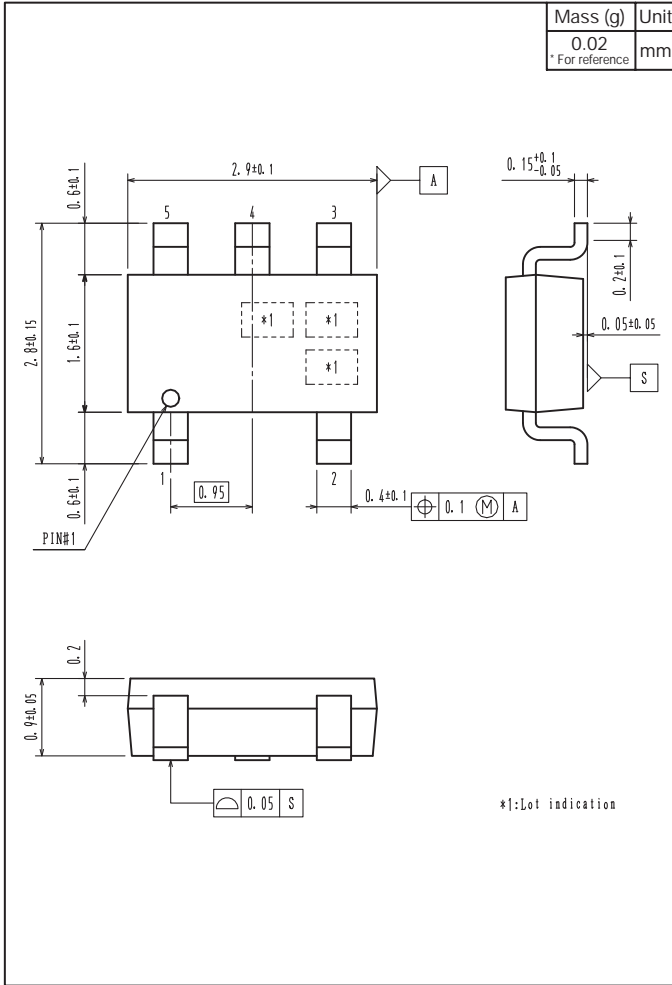
2-2. Device placement direction



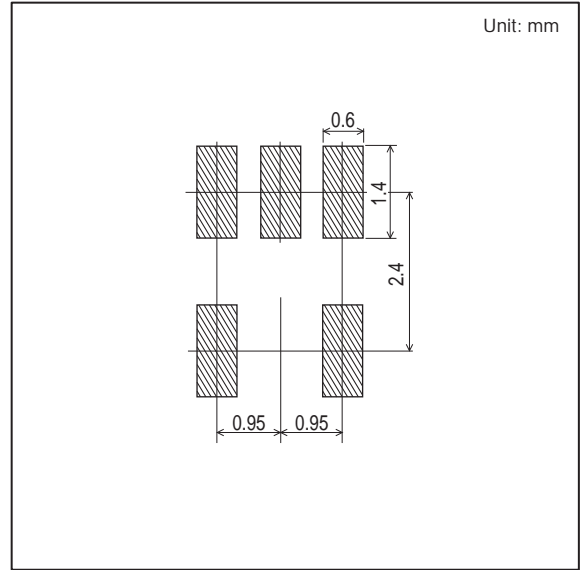
Those with pin 1 index on the feed hole side.....TL

SBE807

Outline Drawing SBE807-TL-E



Land Pattern Example



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