



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

SBE808 — Schottky Barrier Diode 15V, 1A Rectifier

Applications

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

Features

- Small switching noise
- Low leakage current and high reliability due to planar structure
- Ultrasmall package permitting applied sets to be small and slim

Specifications

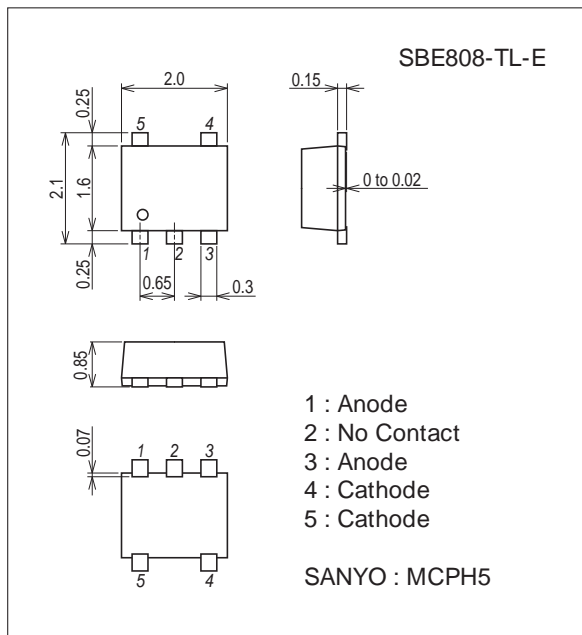
Absolute Maximum Ratings at Ta=25°C (Value per element)

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		15	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		17	V
Average Output Current	IO		1	A
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	10	A
Junction Temperature	Tj		-55 to +150	°C
Storage Temperature	Tstg		-55 to +150	°C

Package Dimensions

unit : mm (typ)

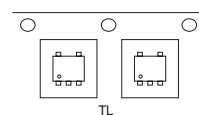
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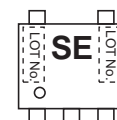
Product & Package Information

- Package : MCPH5
- JEITA, JEDEC : SC-88A, SC-70-5, SOT-353
- Minimum Packing Quantity : 3,000 pcs./reel

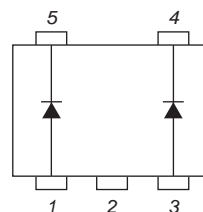
Packing Type : TL



Marking

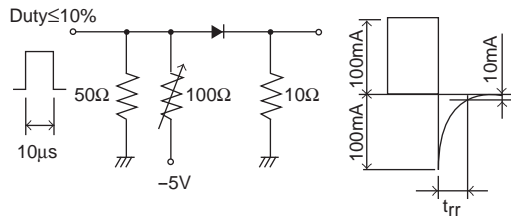


Electrical Connection

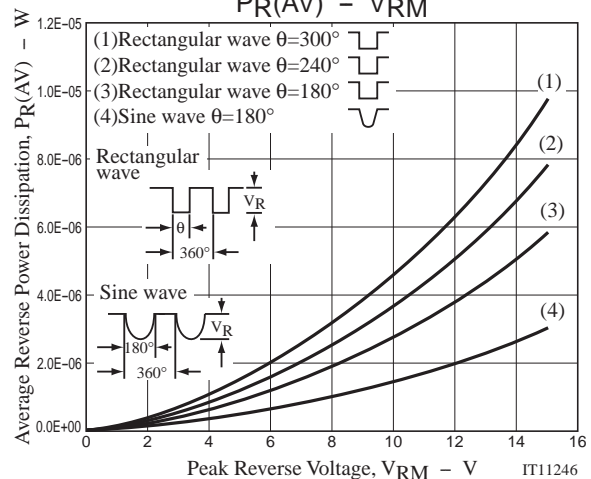
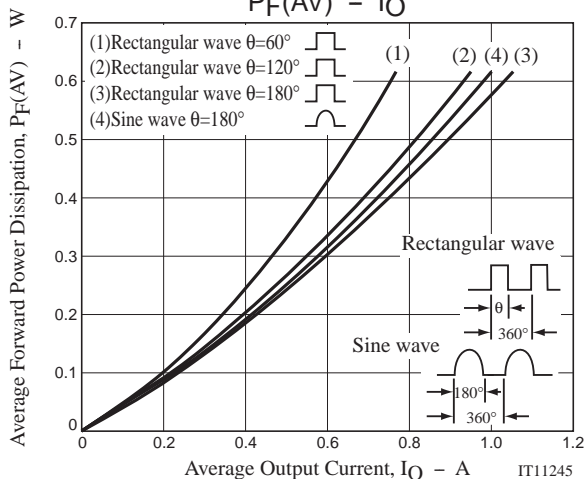
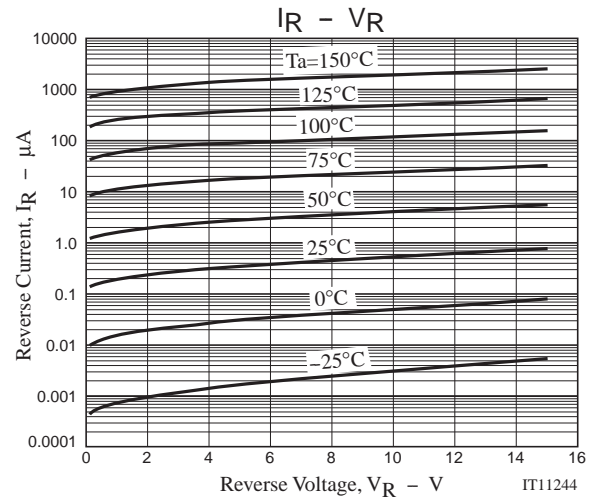
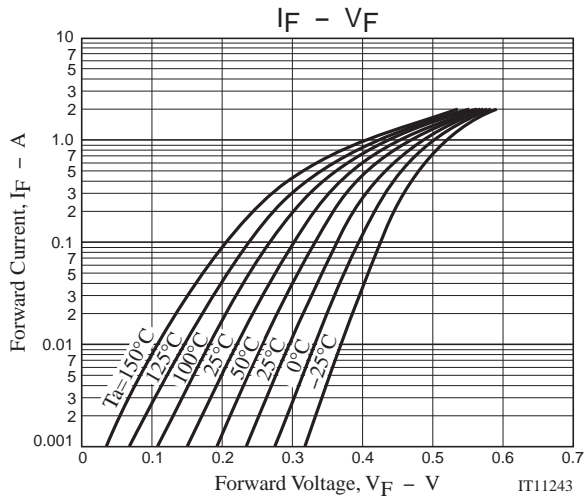


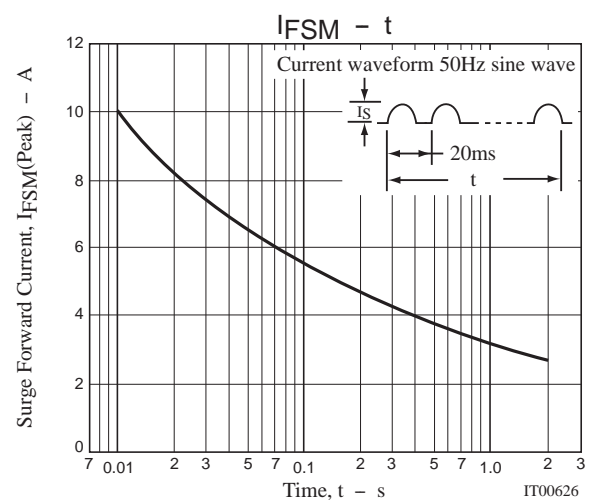
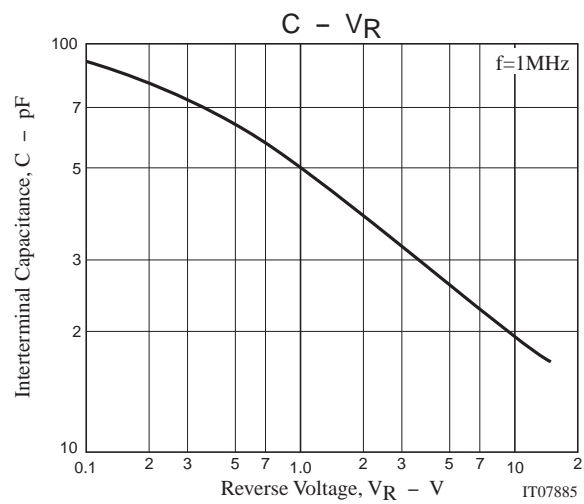
Electrical Characteristics at $T_a=25^\circ\text{C}$ (Value per element)

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=0.1\text{mA}$	15			V
Forward Voltage	V_{F1}	$I_F=0.5\text{A}$		0.43	0.48	V
	V_{F2}	$I_F=1\text{A}$		0.49	0.54	V
Reverse Current	I_R	$V_R=6\text{V}$			3.0	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		20		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$	When mounted on ceramic substrate (600mm \times 0.8mm)		185		$^\circ\text{C} / \text{W}$

 t_{rr} Test Circuit**Ordering Information**

Device	Package	Shipping	memo
SBE808-TL-E	MCPH5	3,000pcs./reel	Pb Free





Taping Specification

SBE808-TL-E

1. Packing Format

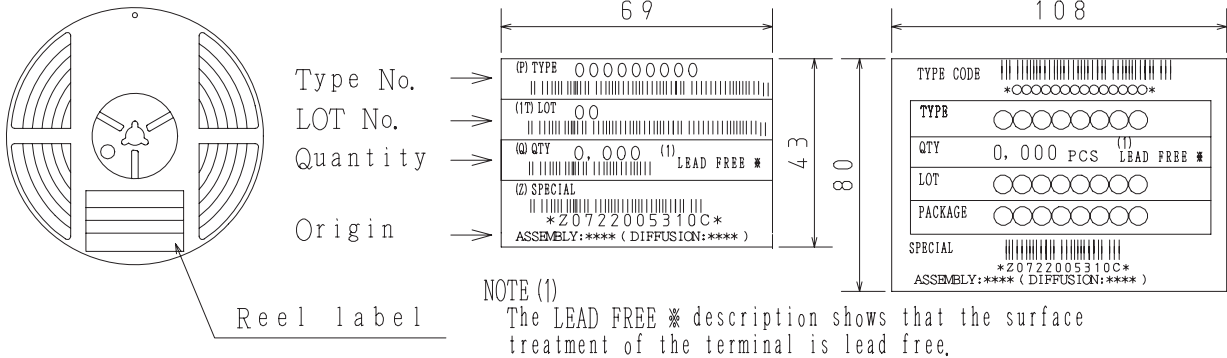
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
MCPH5	MCP 4	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

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.

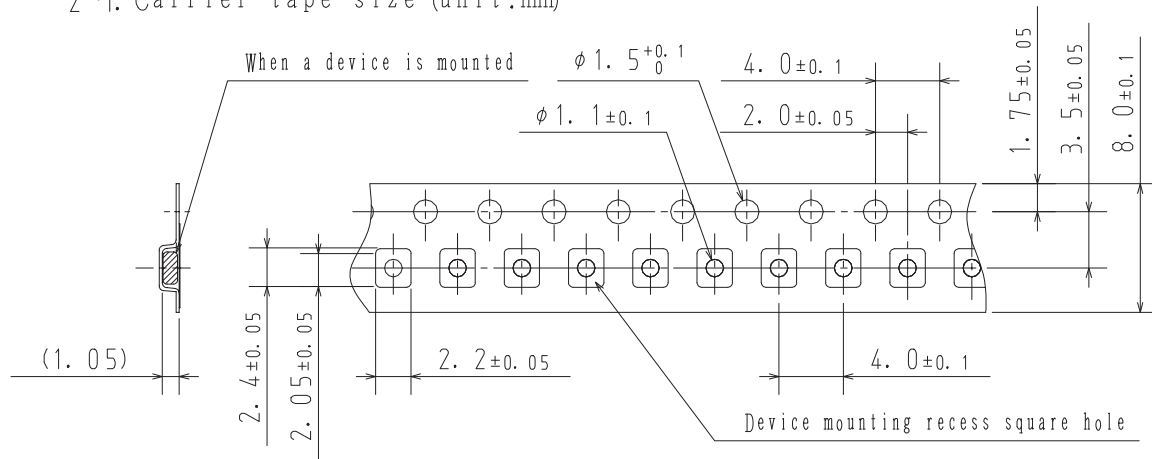
Packing method



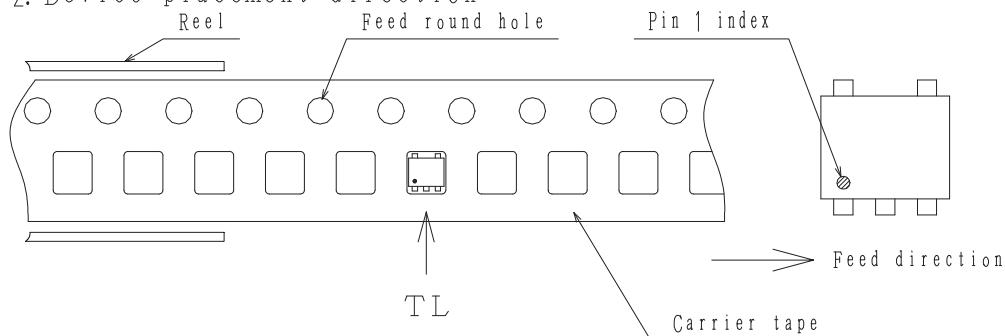
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



2-2. Device placement direction

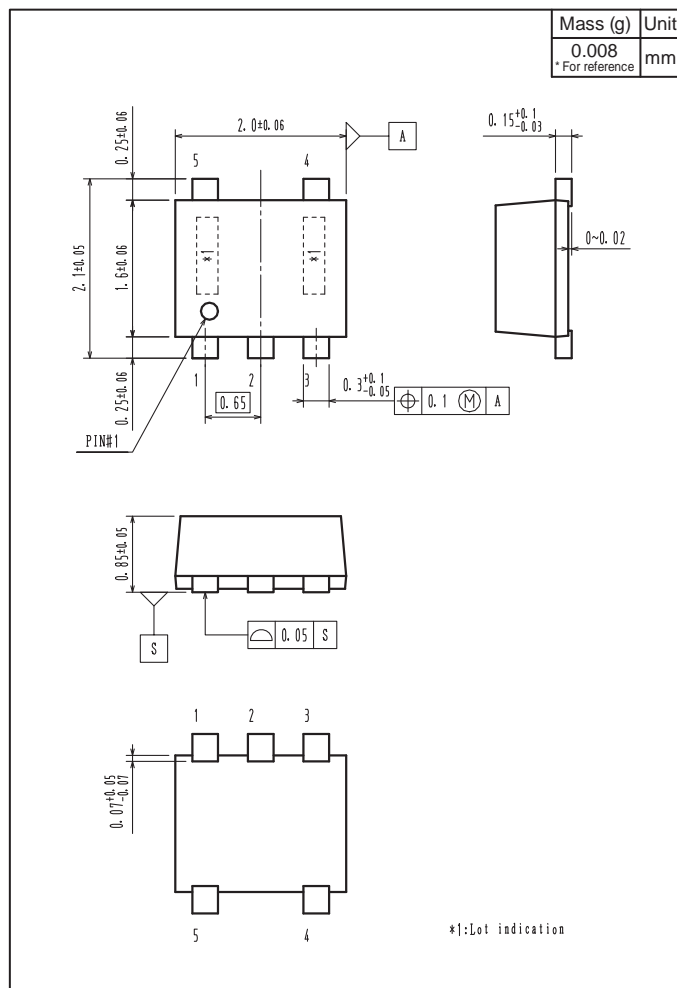


Those with two electrode terminal on the feed hole side.....TL

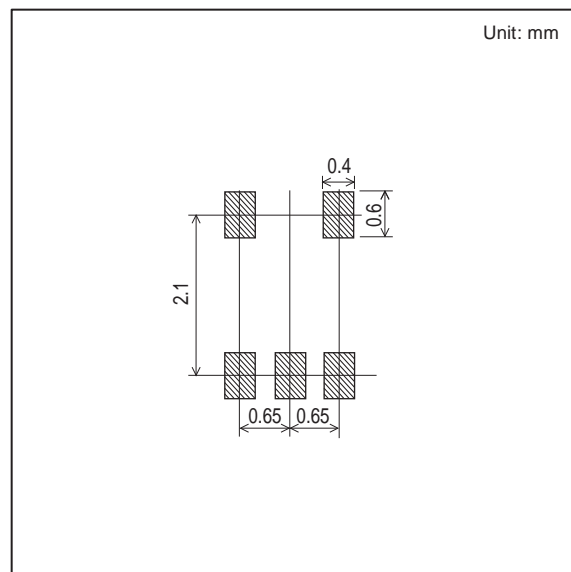
SBE808

Outline Drawing

SBE808-TL-E



Land Pattern Example



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