



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

SS0503SH — Schottky Barrier Diode 30V, 0.5A Rectifier

Applications

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

Features

- Low forward voltage ($I_F=0.3A$, $V_F \text{ max}=0.42V$) ($I_F=0.5A$, $V_F \text{ max}=0.47V$)
- Ultrasmall package permitting applied sets to be small and slim

Specifications

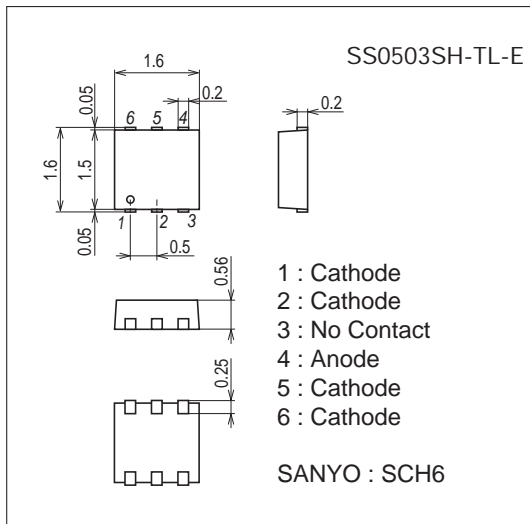
Absolute Maximum Ratings at $T_a=25^\circ C$

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		0.5	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	5	A
Junction Temperature	T_j		-55 to +125	$^\circ C$
Storage Temperature	T_{stg}		-55 to +125	$^\circ C$

Package Dimensions

unit : mm (typ)

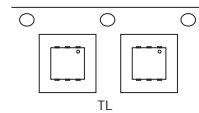
7028-001



Product & Package Information

- Package : SCH6
- JEITA, JEDEC : SOT-563
- Minimum Packing Quantity : 5,000 pcs./reel

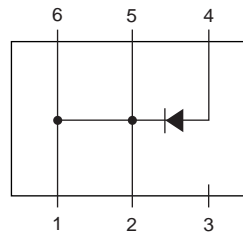
Packing Type : TL



Marking



Electrical Connection

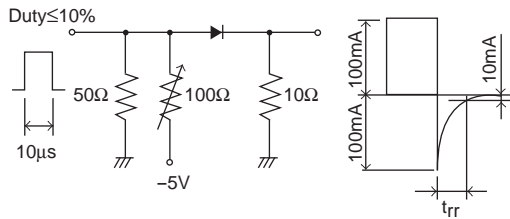


SS0503SH

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=0.5mA$	30			V
Forward Voltage	V_{F1}	$I_F=0.3A$		0.37	0.42	V
	V_{F2}	$I_F=0.5A$		0.42	0.47	V
Reverse Current	I_R	$V_R=15V$			120	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		13		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit.			10	ns

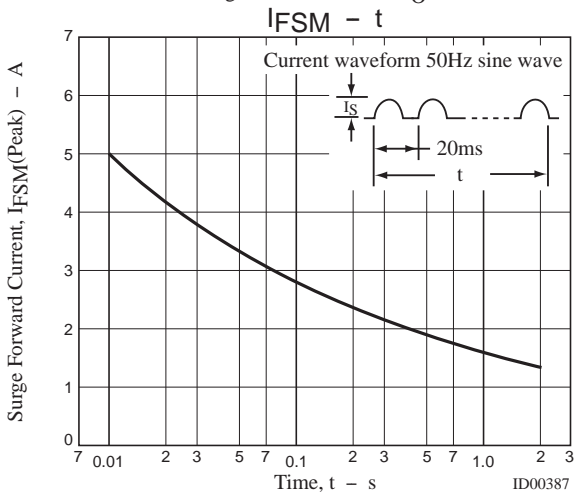
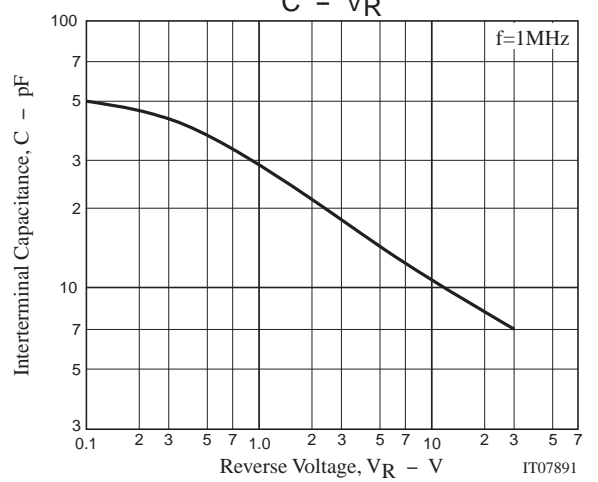
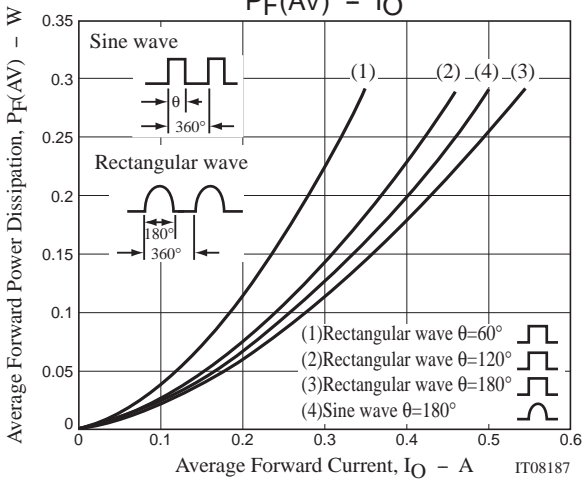
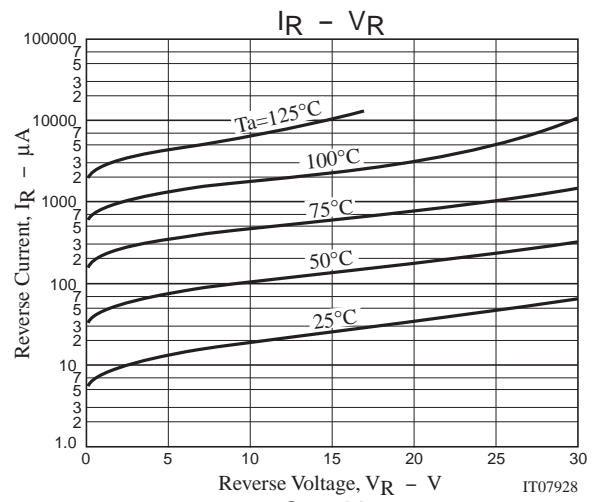
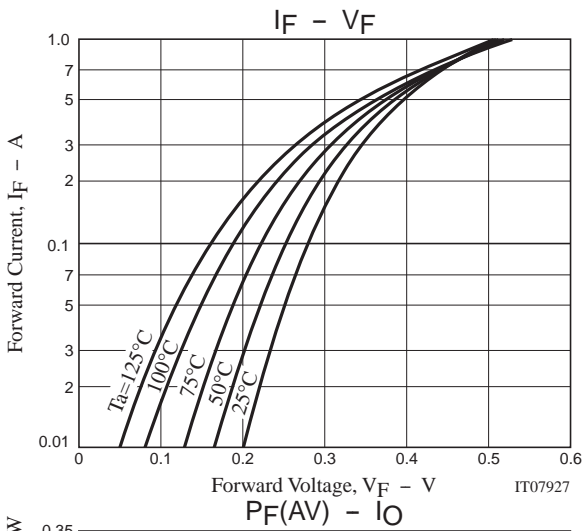
t_{rr} Test Circuit



Ordering Information

Device	Package	Shipping	memo
SS0503SH-TL-E	SCH6	5,000pcs./reel	Pb Free

SS0503SH



Embossed Taping Specification

SS0503SH-TL-E

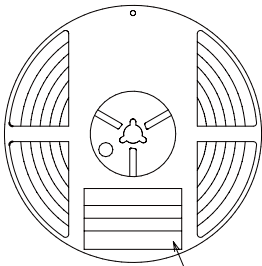
1. Packing Format

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)
SCH6	SCH6	5,000	25,000	150,000	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)

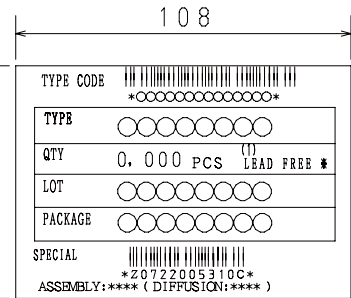
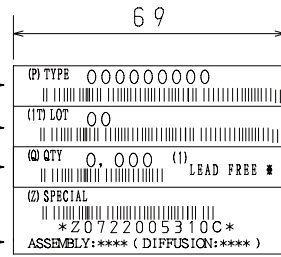
Outer box label
It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.

Packing method



Type No.
LOT No.
Quantity
Origin

Reel label



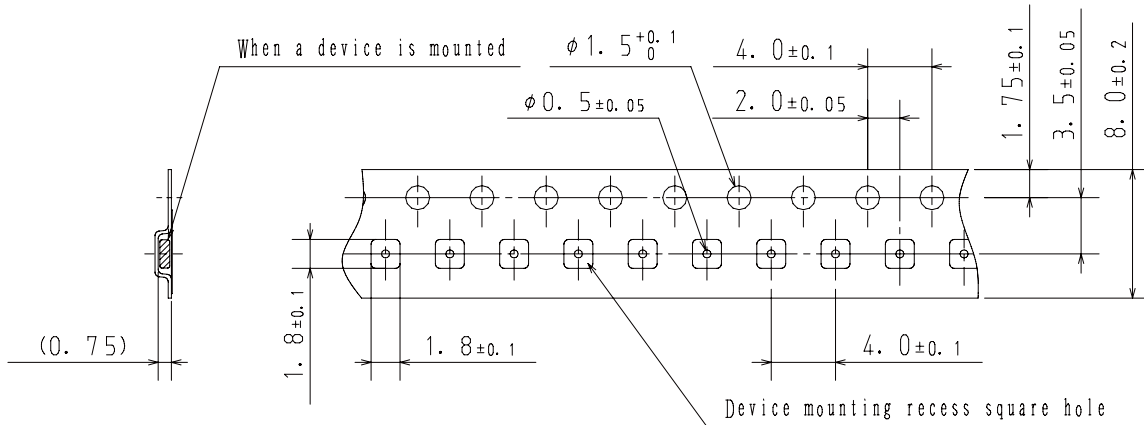
NOTE (1)

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

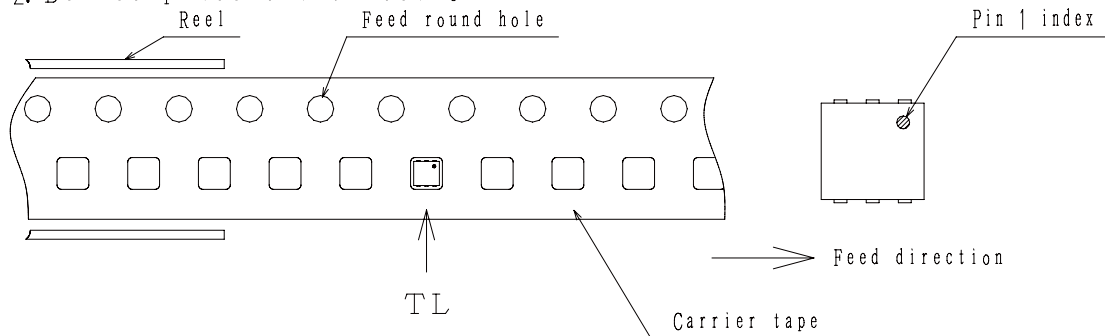
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



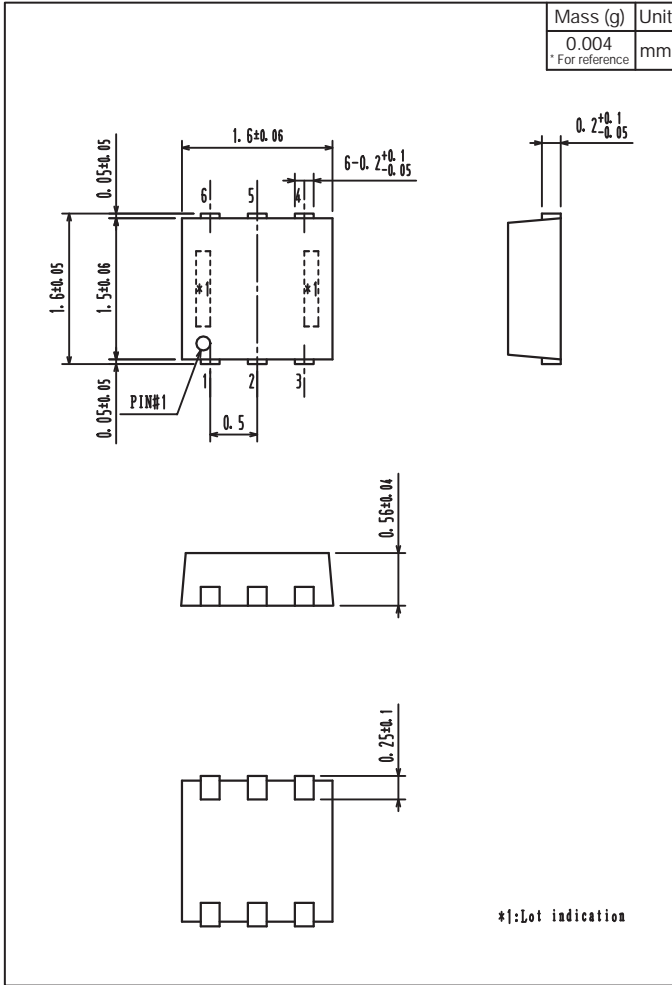
2-2. Device placement direction



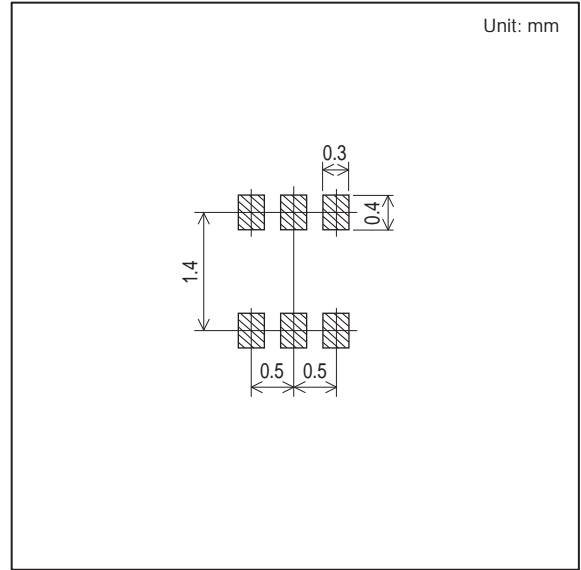
Those with pin 1 index on the feed hole side.....TL

SS0503SH

Outline Drawing SS0503SH-TL-E



Land Pattern Example



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