



SANYO Semiconductors

## DATA SHEET

# SB0503SH

 — Schottky Barrier Diode  
**30V, 0.5A Rectifier**

## Applications

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

## Features

- Low Switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Ultrasmall package permitting SB0503SH applied sets to be made small and slim.

## Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		30	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		35	V
Average Output Current	IO		0.5	A
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	5	A
Junction Temperature	TJ		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

**Electrical Characteristics** at Ta=25°C (Value per element)

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	VR	IR=0.2mA	30			V
Forward Voltage	VF	IF=0.5A		0.51	0.56	V
Reverse Current	IR	VR=15V			6	μA
Interterminal Capacitance	C	VR=10V, f=1MHz		13		pF
Reverse Recovery Time	trr	IF=IR=100mA, See specified Test Circuit.			10	ns
Thermal Resistance	Rth(j-a)1	Mounted in Cu-foiled area of 0.72mm <sup>2</sup> X0.03mm on glass epoxy board		70		°C / W
	Rth(j-a)2	Mounted on a ceramic board (600mm <sup>2</sup> X0.8mm)		66		°C / W

Marking : SD

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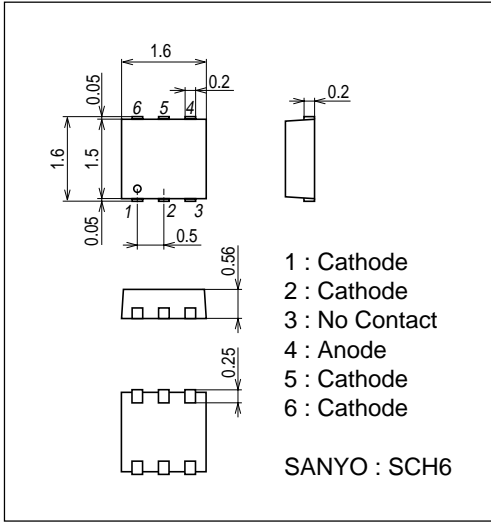
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# SB0503SH

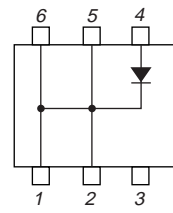
## Package Dimensions

unit : mm  
7028-001



## Electrical Connection

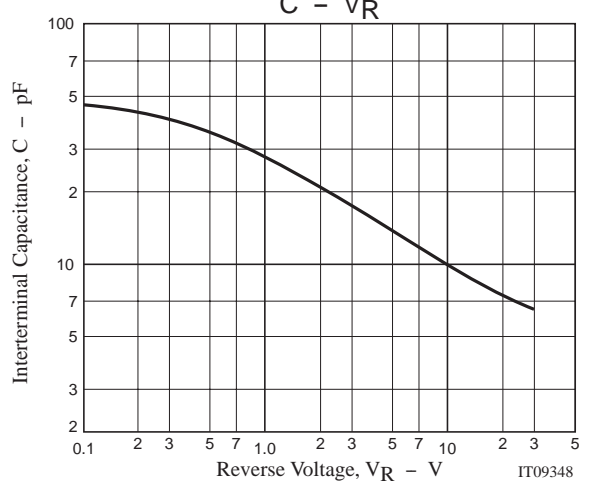
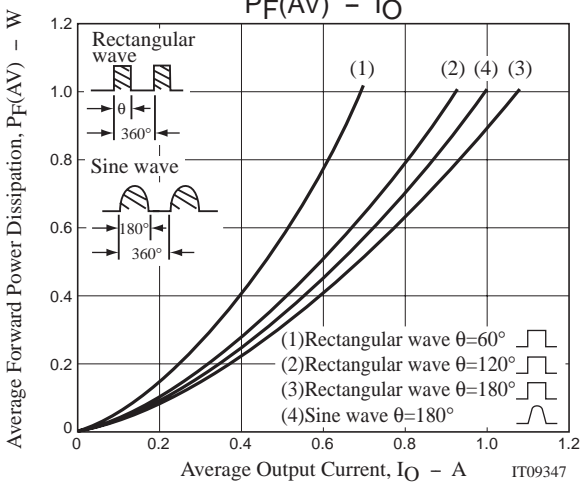
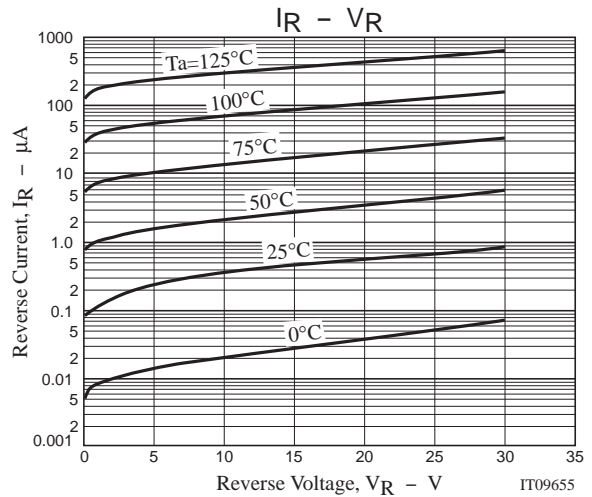
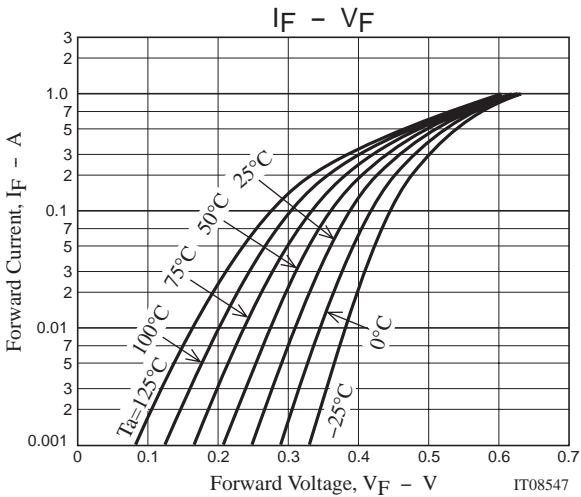
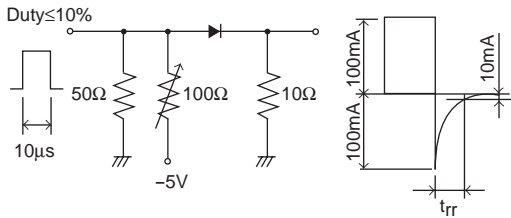
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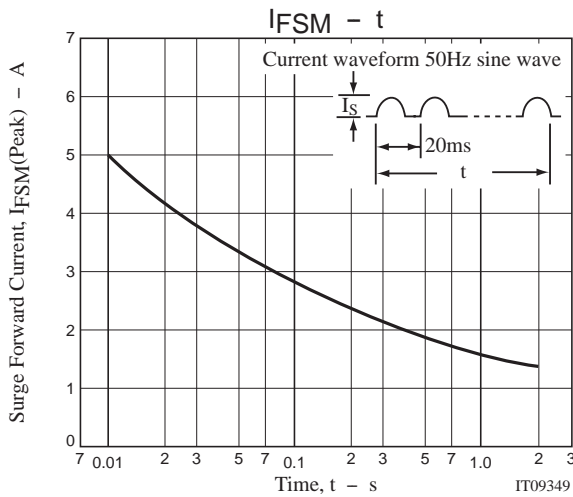


- 1 : Cathode
- 2 : Cathode
- 3 : No Contact
- 4 : Anode
- 5 : Cathode
- 6 : Cathode

Top view

## t<sub>rr</sub> Test Circuit





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