



# SANYO Semiconductors

## DATA SHEET

# SBE813

Low IR Schottky Barrier Diode  
**30V, 3.0A Rectifier**

### Applications

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

### Features

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

### Specifications

#### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		30	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		35	V
Average Output Current	IO		3.0	A
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	20	A
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

#### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	VR	IR=0.5mA	30			V
Forward Voltage	VF1	IF=2.0A		0.435	0.485	V
	VF2	IF=3.0A		0.47	0.52	V
Reverse Current	IR	VR=15V			42	μA
Interterminal Capacitance	C	VR=10V, f=1MHz		90		pF
Reverse Recovery Time	trr	IF=IR=100mA, See specified Test Circuit.			20	ns
Thermal Resistance	Rth(j-a)	Mounted on a ceramic board (1200mm <sup>2</sup> X0.8mm)		50		°C / W

Marking : SE

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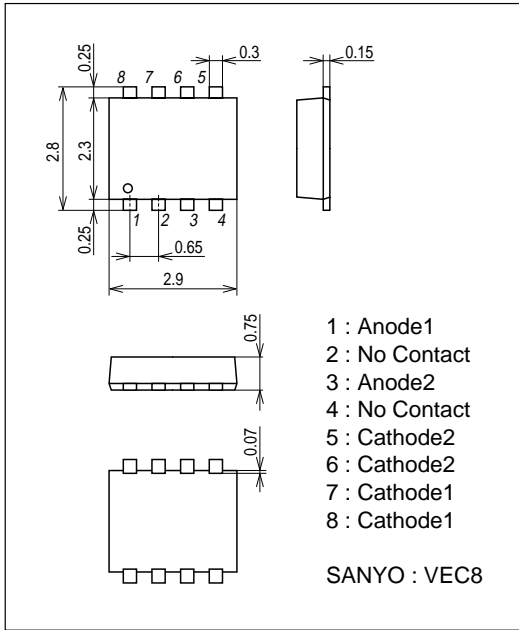
**SANYO Semiconductor Co., Ltd.**

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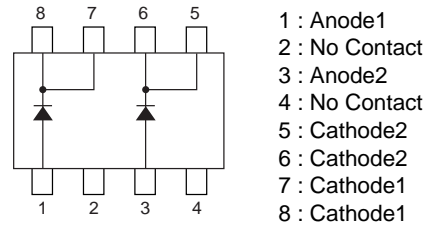
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Package Dimensions

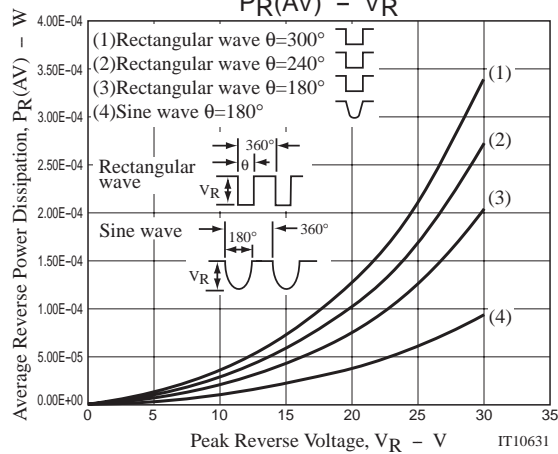
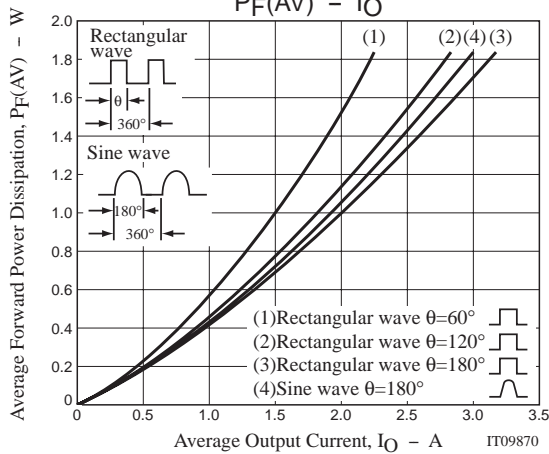
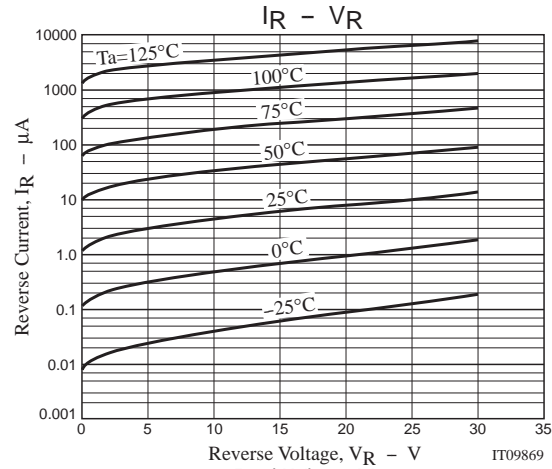
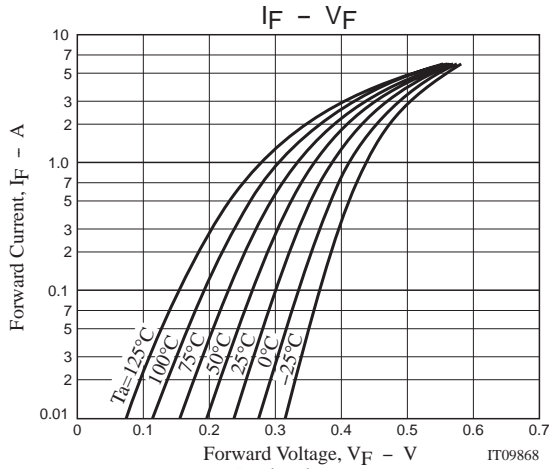
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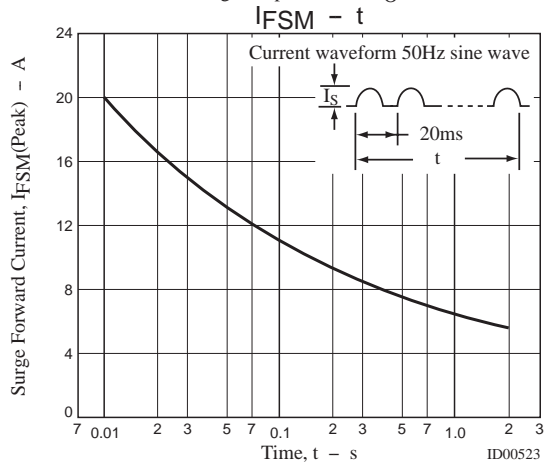
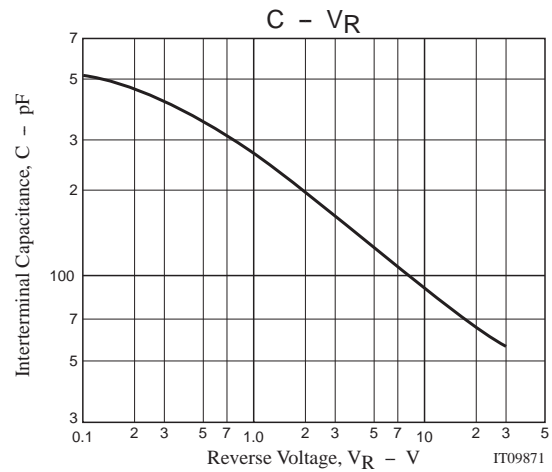
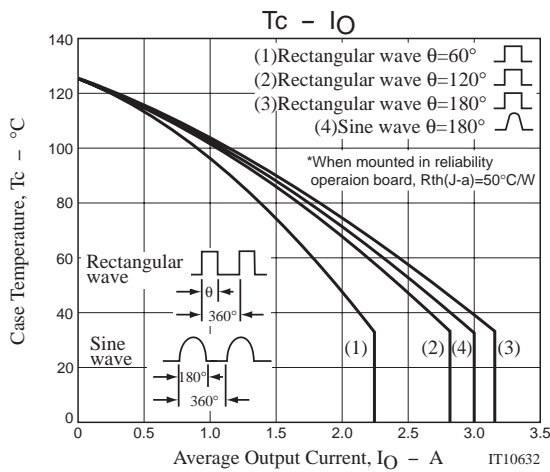


Electrical Connection



Top view





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