

# SANYO Semiconductors DATA SHEET

## SBE811 Schottky Barrier Diode 30V, 2.0A 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	lO		2.0	Α
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	10	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	Unit
Reverse Voltage	VR	IR=200μA	30			V
Forward Voltage	VF	IF=1.0A		0.40	0.45	V
		IF=2.0A		0.45	0.50	V
Reverse Current	IR	V <sub>R</sub> =15V			30	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		75		pF
Reverse Recovery Time	t <sub>rr</sub>	IF=IR=100mA, See specified Test Circuit.			20	ns
Therrmal Resistance	Rth(j-a)1	Mounted in Cu-foiled area of 1.92mm <sup>2</sup> X0.03mm		75		°C / W
		on glass epoxy board				
	Rth(j-a)2	Mounted on a ceramic board (1000mm <sup>2</sup> X0.8mm)		70		°C / W

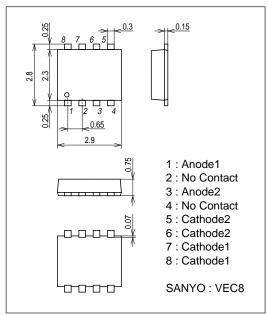
Marking : SC

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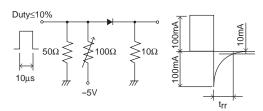
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#### **Package Dimensions**

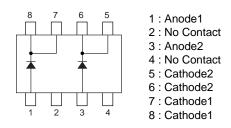
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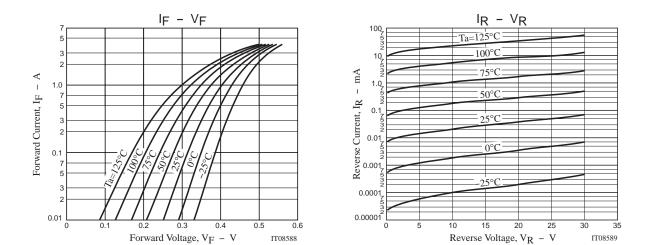
## trr Test Circuit

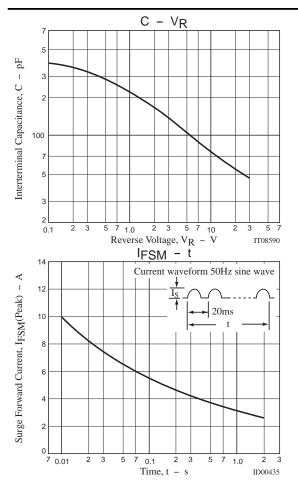


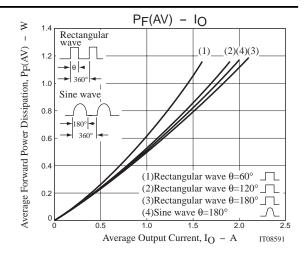
## **Electrical Connection**



Top view







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