

# SANYO Semiconductors DATA SHEET

# SBE812 — Schottky Barrier Diode 60V, 1.0A 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 allows applied sets to be made small and thin.

# **Specifications**

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		60	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		65	V
Average Output Current	IO		1.0	А
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	10	А
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	Unit
Reverse Voltage	VR	I <sub>R</sub> =0.2mA	60			V
Forward Voltage	VF	IF=1A		0.55	0.60	V
Reverse Current	IR	V <sub>R</sub> =30V			30	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		35		pF
Reverse Recovery Time	trr	IF=100mA, See specified Test Circuit.			10	ns
Thermal Resistance	Rth(j-a)1	Mounted in Cu-foiled area of 1.92mm <sup>2</sup> X0.03mm		80		°C/W
		on glass epoxy board				0/10
	Rth(j-a)2	Mounted on a ceramic board (1000mm <sup>2</sup> X0.8mm)		75		°C / W

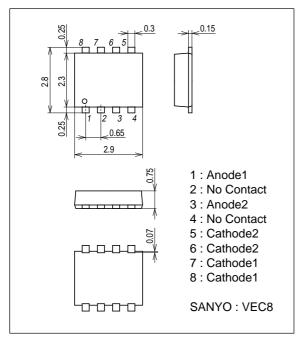
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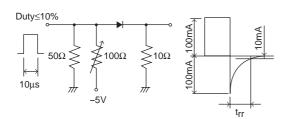
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### **Package Dimensions**

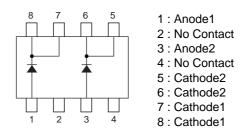
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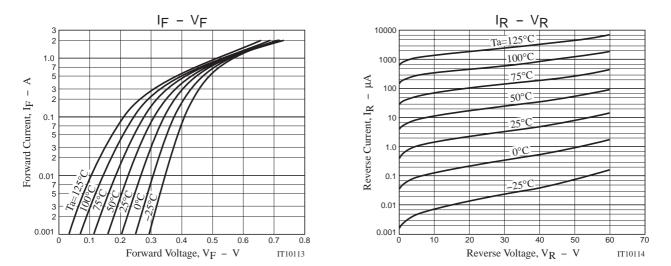
# trr Test Circuit

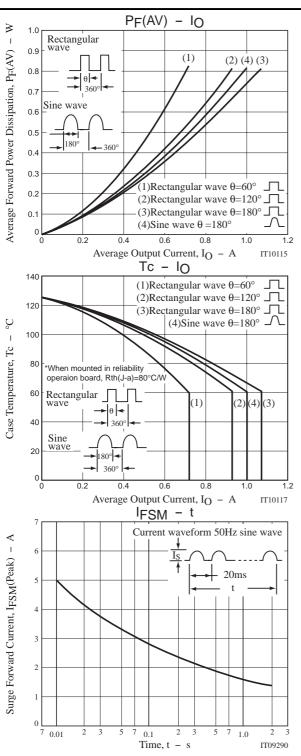


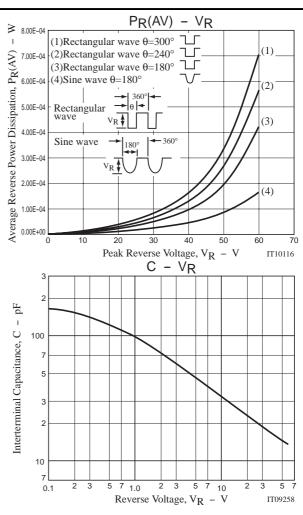




Top view







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