

SANYO Semiconductors DATA SHEET

SBE818 — Low IR Schottky Barrier Diode 30V, 2.0A Rectifier

Applications

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

Features

- · Composite type device with 2 low IR SBD shoused in one package, facilitating high density mounting.
- Small switching noise.
- Low forward voltage (IF=2.0A, VF max=0.62V).
- Low reverse current (VR=15V, IR max=7.5 μ A).
- Ultrasmall package permitting applied sets to be small and slim (Mounting height 0.75mm).

Specifications

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

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	IO	When mounted on ceramic substrate, Rectangular wave 180°C	2.0	А
		When mounted on glass epoxy substrate	1.5	А
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	20	А
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

Marking : SC

- *: The absolute maximum ratings and electrical characteristics refer to those between Terminal 1 and Terminal 7 (or 8), and between Terminal 3 and Terminal 5 (or 6).
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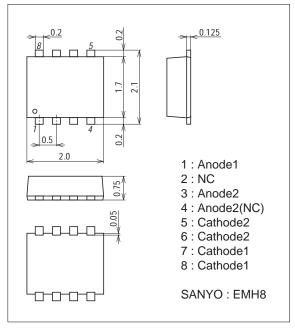
Electrical Characteristics at Ta=25°C (Value per element)

Parameter	Currente al	Conditions	Ratings			1114
	Symbol		min	typ	max	Unit
Reverse Voltage	VR	IR=1mA	30			V
Forward Voltage	V _F 1	I _F =1.0A		0.48	0.53	V
	V _F 2	IF=1.5A		0.53	0.58	V
	V _F 3	IF=2.0A		0.57	0.62	V
Reverse Current	IR	V _R =15V			7.5	μΑ
Interterminal Capacitance	С	V _R =10V, f=1MHz		30		pF
Reverse Recovery Time	t _{rr}	IF=IR=100mA, See specified Test Circuit.			10	ns
Thermal Resistance	Rth(j-a)1	When mounted in Cu-foiled area of 0.96mm ² x0.03mm on glass epoxy substrate		100		°C/W
	Rth(j-a)2	When mounted on ceramic substrate (900mm ² ×0.8mm)		65		°C/W

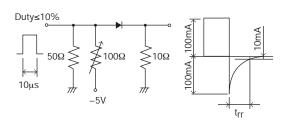
Package Dimensions

unit : mm (typ)

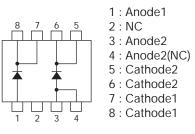




trr Test Circuit

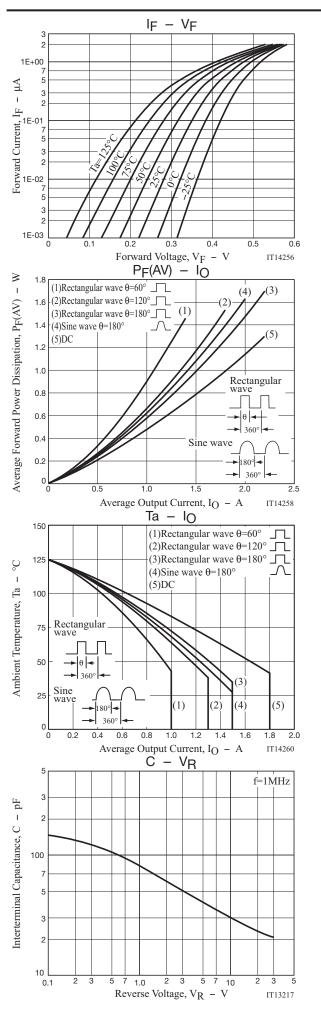


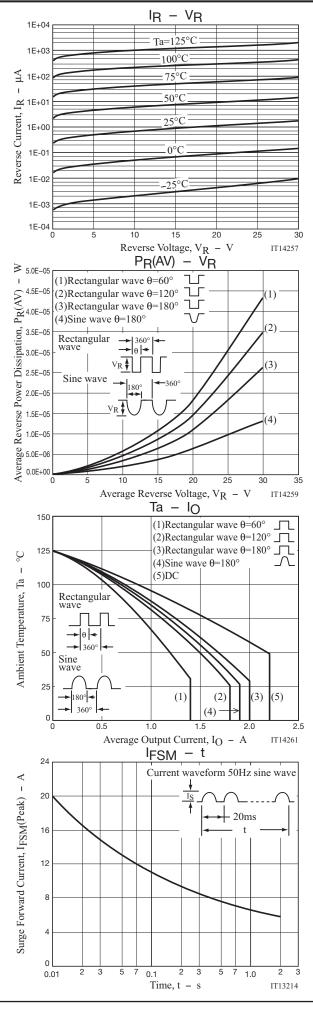
Electrical Connection



Top view

*: Terminal 4 is used for the purposes such as test. Although it is connected to Anode 2, please handle it as NC Terminal





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