



SBE808

Schottky Barrier Diode 15V, 1A, Low IR

ON Semiconductor®

<http://onsemi.com>

Applications

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

Features

- Small switching noise
- Halogen free compliance
- Low leakage current and high reliability due to planar structure
- Ultrasmall package permitting applied sets to be small and slim

Specifications

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

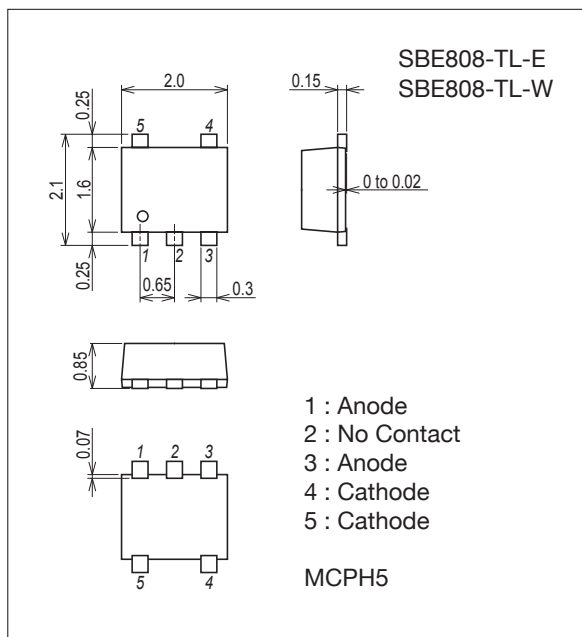
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		15	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		17	V
Average Output Current	IO		1	A
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	10	A
Junction Temperature	Tj		-55 to +150	°C
Storage Temperature	Tstg		-55 to +150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

Package Dimensions

unit : mm (typ)

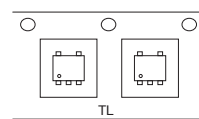
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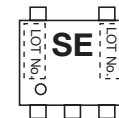
Product & Package Information

- Package : MCPH5
- JEITA, JEDEC : SC-88A, SC-70-5, SOT-353
- Minimum Packing Quantity : 3,000 pcs./reel

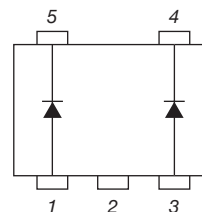
Packing Type : TL



Marking



Electrical Connection



ORDERING INFORMATION

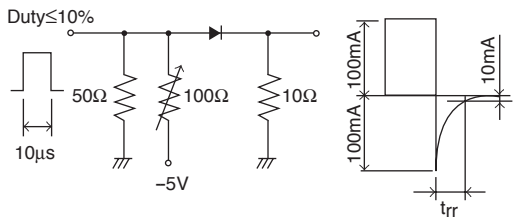
See detailed ordering and shipping information on page 2 of this data sheet.

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=0.1mA$	15			V
Forward Voltage	V_{F1}	$I_F=0.5A$		0.43	0.48	V
	V_{F2}	$I_F=1A$		0.49	0.54	V
Reverse Current	I_R	$V_R=6V$			3.0	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		20		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$	When mounted on ceramic substrate (600mm ² ×0.8mm)		185		°C / W

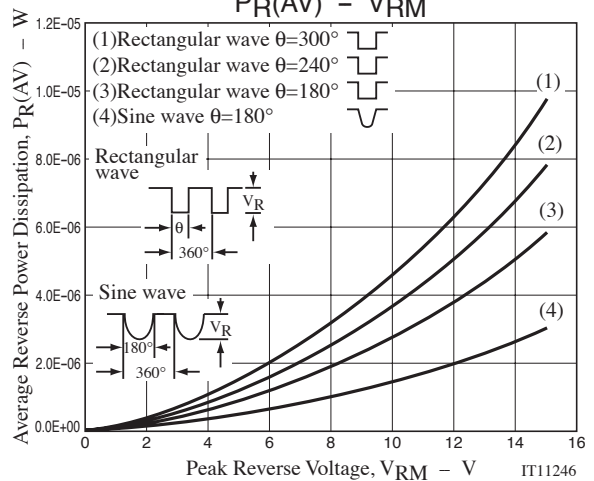
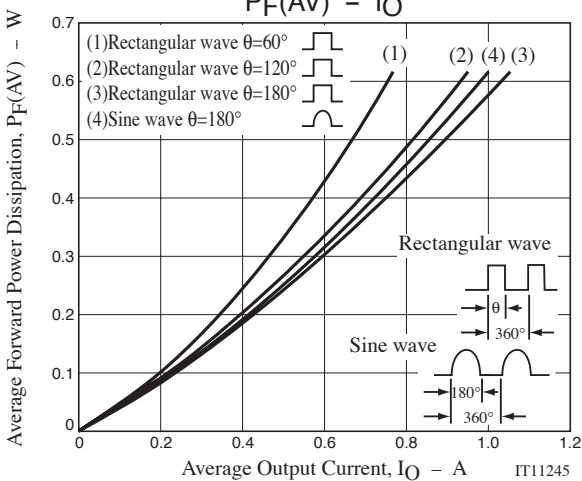
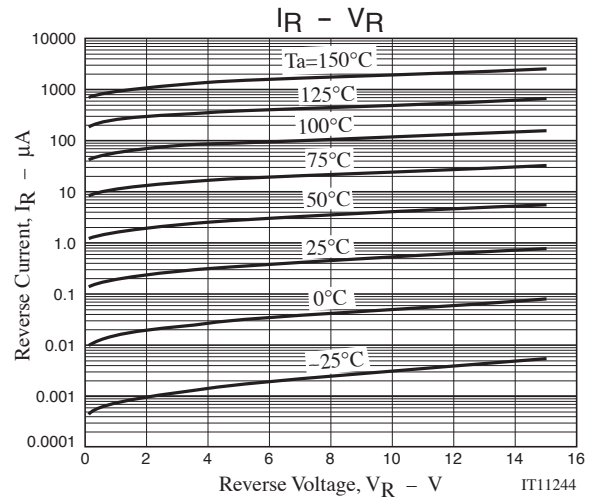
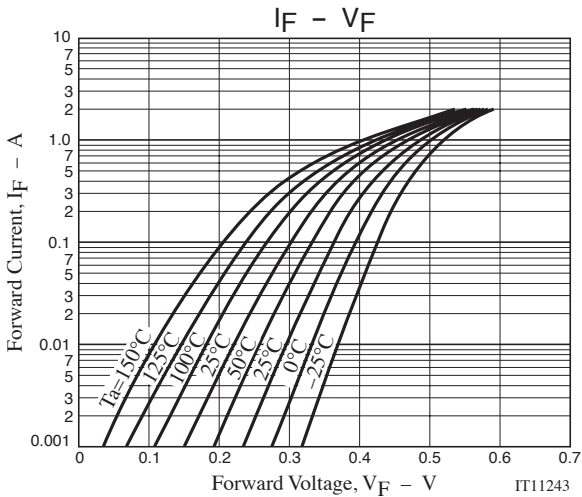
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

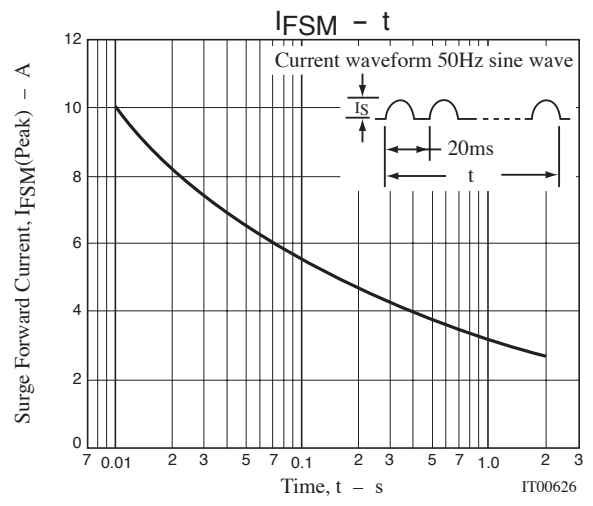
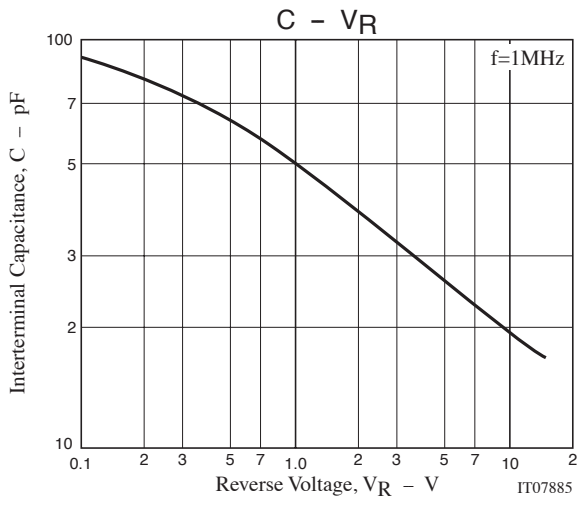
t_{rr} Test Circuit



Ordering Information

Device	Package	Shipping	memo
SBE808-TL-E	MCPH5	3,000pcs./reel	Pb-Free
SBE808-TL-W	MCPH5	3,000pcs./reel	Pb-Free and Halogen Free

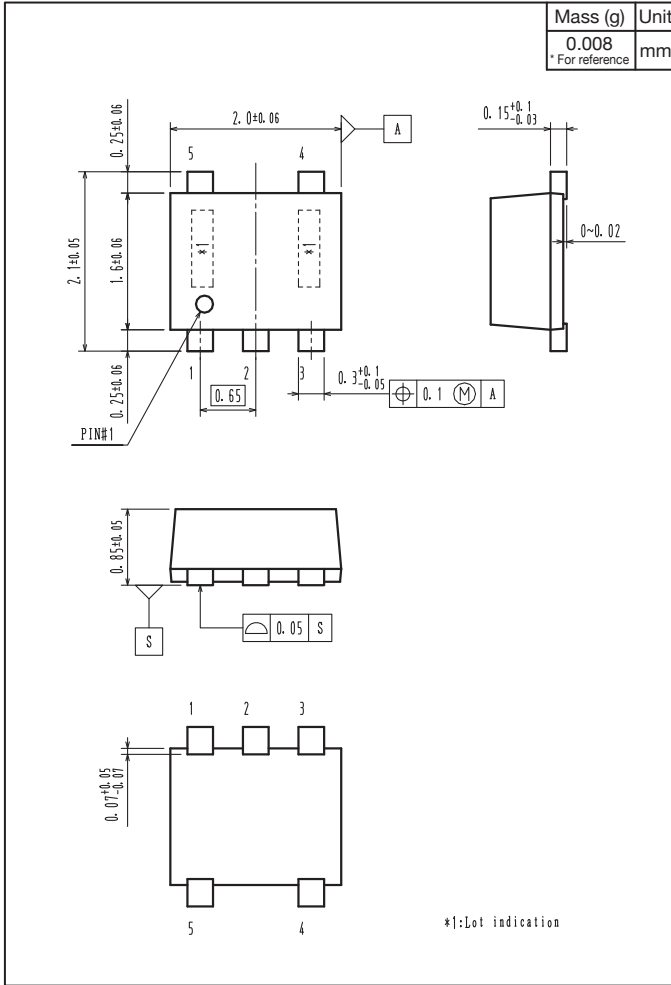




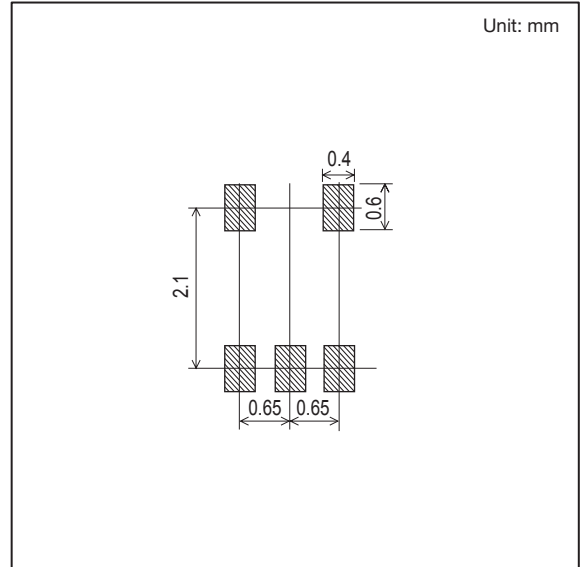
SBE808

Outline Drawing

SBE808-TL-E, SBE808-TL-W



Land Pattern Example



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