



# SBE807

## Schottky Barrier Diode 30V, 1A, Low IR

ON Semiconductor®

<http://onsemi.com>

### Applications

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

### Features

- Low switching noise
- Low reverse current ( $V_R=16V$ ,  $I_R \text{ max}=15\mu A$ )

### Specifications

#### Absolute Maximum Ratings at $T_a=25^\circ C$

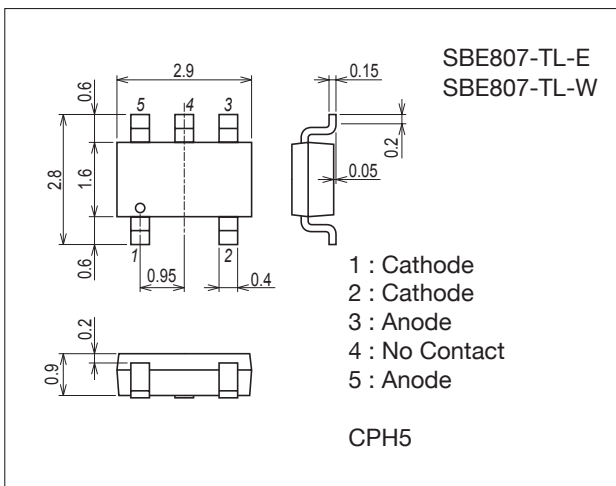
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		30	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		35	V
Average Output Current	$I_O$		1.0	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	10	A
Junction Temperature	$T_J$		-55 to +125	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ C$

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)

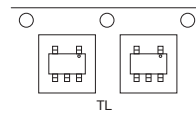
7017A-001



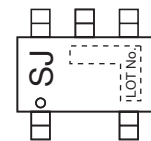
### Product & Package Information

- Package : CPH5
- JEITA, JEDEC : SC-74A, SOT-25
- Minimum Packing Quantity : 3,000 pcs./reel

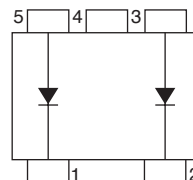
### Packing Type : TL



### Marking



### Electrical Connection



### ORDERING INFORMATION

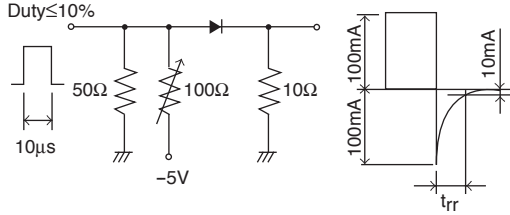
See detailed ordering and shipping information on page 2 of this data sheet.

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V <sub>R</sub>	I <sub>R</sub> =0.2mA	30			V
Forward Voltage	V <sub>F1</sub>	I <sub>F</sub> =0.7A		0.45	0.50	V
	V <sub>F2</sub>	I <sub>F</sub> =1.0A		0.48	0.53	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =16V			15	μA
Interterminal Capacitance	C	V <sub>R</sub> =10V, f=1MHz		27		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =100mA, See specified Test Circuit.			10	ns
Thermal Resistance	R <sub>th(j-a)</sub>	When mounted on ceramic substrate (900mm <sup>2</sup> ×0.8mm)		111		°C / W

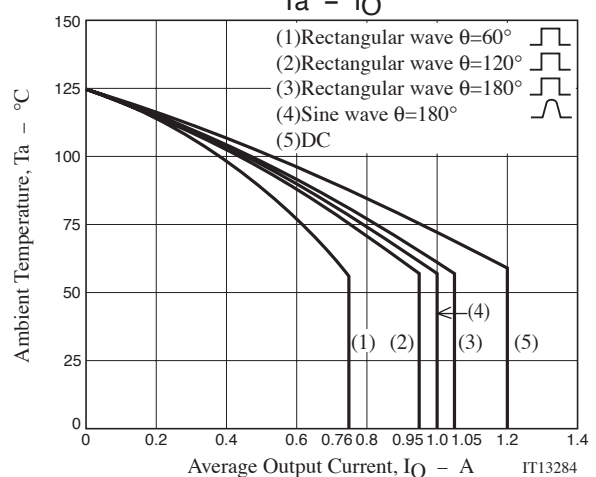
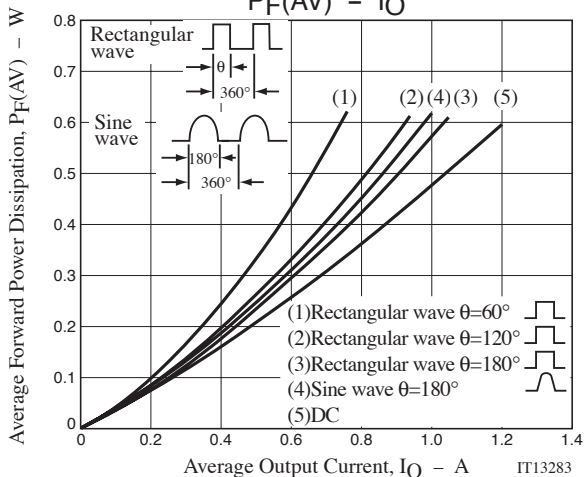
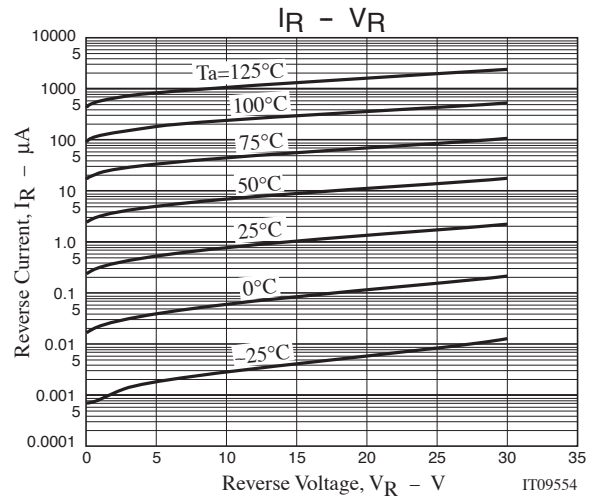
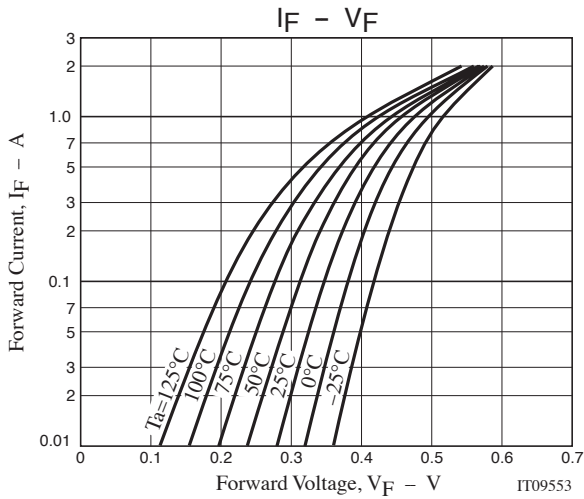
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

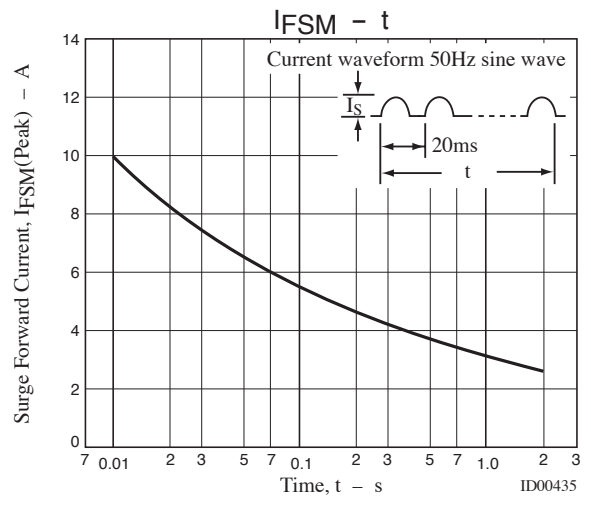
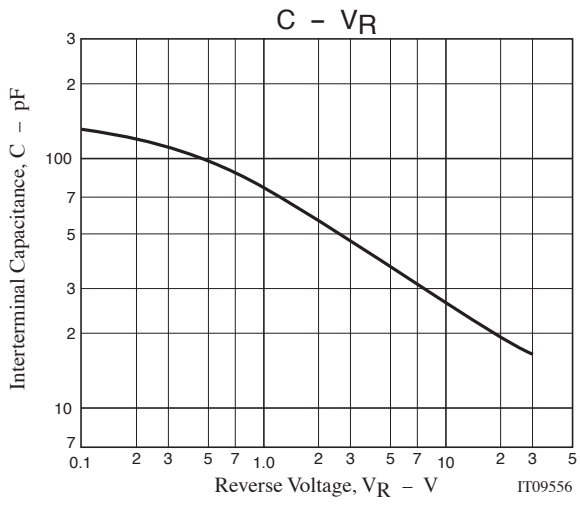
t<sub>rr</sub> Test Circuit



Ordering Information

Device	Package	Shipping	memo
SBE807-TL-E	CPH5	3,000pcs./reel	Pb-Free
SBE807-TL-W			Pb-Free and Halogen Free

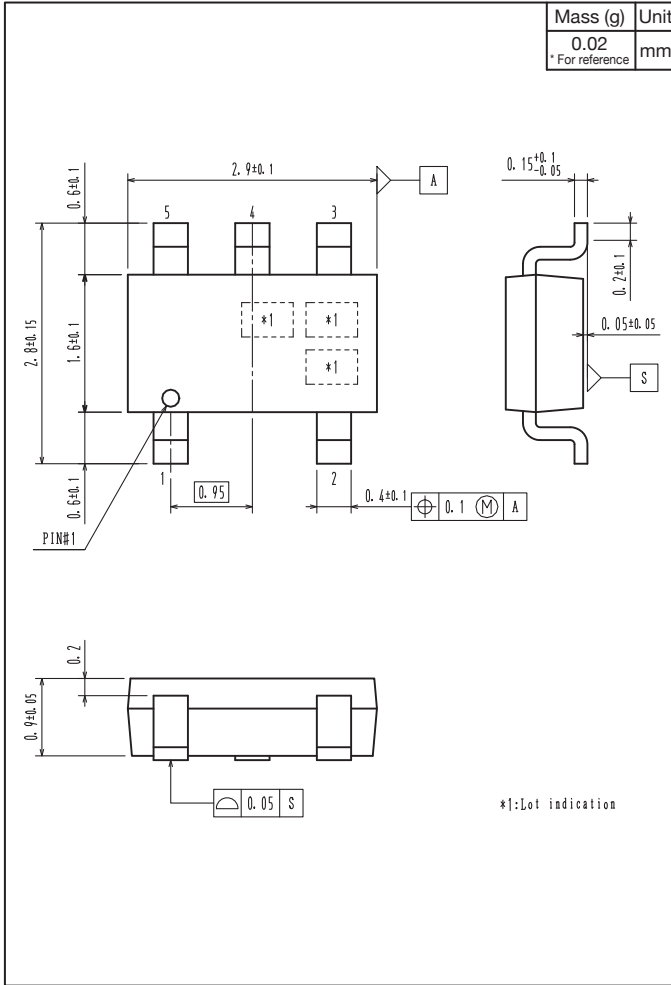




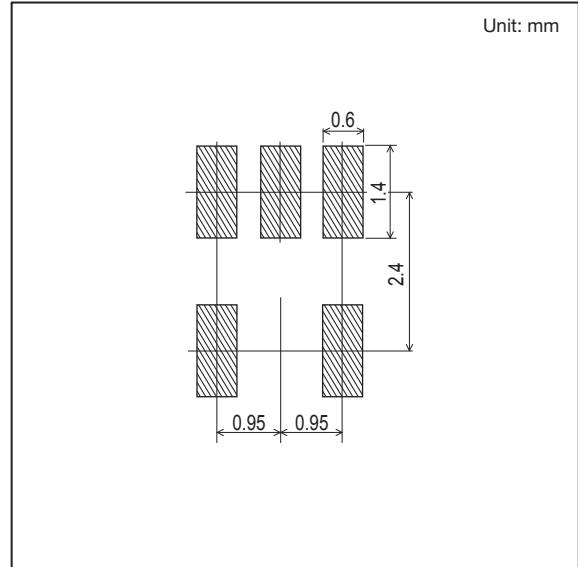
# SBE807

## Outline Drawing

SBE807-TL-E, SBE807-TL-W



## Land Pattern Example



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