

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SBE808

ON Semiconductor®

Schottky Barrier Diode 15V, 1A, Low IR

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

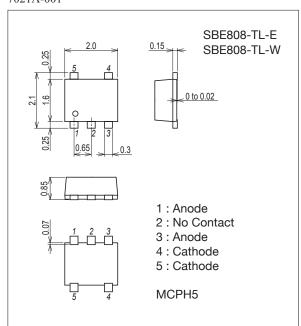
Absolute Maximum Ratings at Ta=25°C (Value per element)

| 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 | Α |
| Surge Forward Current | IFSM | 50Hz sine wave, 1 cycle | 10 | Α |
| 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) 7021A-001



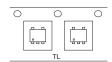
Product & Package Information

• Package : MCPH5

• JEITA, JEDEC : SC-88A, SC-70-5, SOT-353

• Minimum Packing Quantity : 3,000 pcs./reel

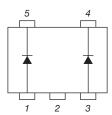
Packing Type: TL



Marking



Electrical Connection



ORDERING INFORMATION

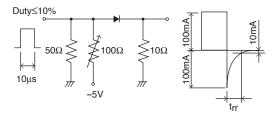
See detailed ordering and shipping information on page 2 of this data sheet.

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

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------|------------------|---|---------|------|------|-------|
| | | Conditions | min | typ | max | Offic |
| Reverse Voltage | VR | I _R =0.1mA | 15 | | | V |
| Forward Voltage | V _F 1 | IF=0.5A | | 0.43 | 0.48 | V |
| | V _F 2 | I _F =1A | | 0.49 | 0.54 | V |
| Reverse Current | IR | V _R =6V | | | 3.0 | μΑ |
| Interterminal Capacitance | С | V _R =10V, f=1MHz | | 20 | | pF |
| Reverse Recovery Time | t _{rr} | IF=IR=100mA, See specified Test Circuit. | | 10 | ns | |
| Thermal Resistance | Rth(j-a) | When mounted on ceramic substrate (600mm ² ×0.8mm) | | 185 | | °C/W |

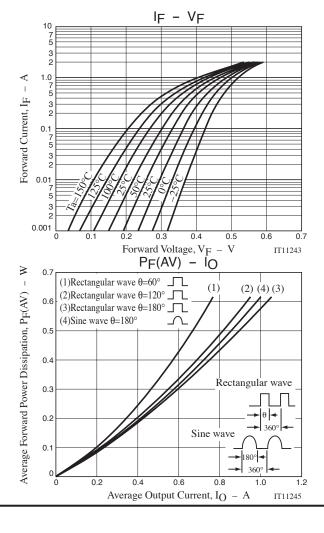
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

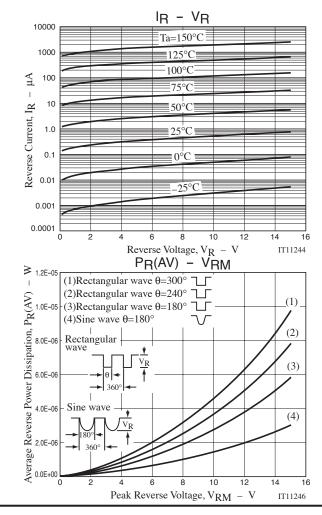
trr Test Circuit

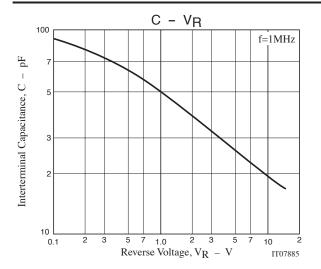


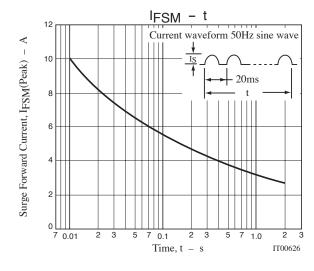
Ordering Information

| 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 | |









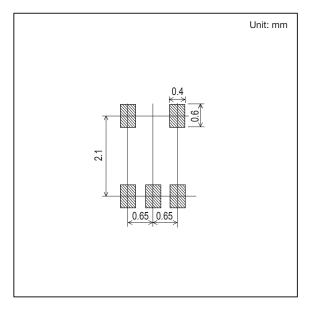
Outline Drawing

SBE808-TL-E, SBE808-TL-W

Mass (g) Unit 0.008 mm 0. 15^{+0. 1}_{-0. 03} 0. 25±0.06 2. 0±0.06 5 4 0~0.02 2, 1±0, 05 6±0.06 Q 0. 3^{+0. 1} 0.65 PIN#1 85±0.05 ○ 0. 05 S

*1:Lot indication

Land Pattern Example



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