



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





SBE805

Schottky Barrier Diode 30V, 0.5A, Low IR

ON Semiconductor®

<http://onsemi.com>

Features

- Low forward voltage (V_F max=0.55V)
- Fast reverse recovery time (t_{rr} max=10ns)
- Composite type with 2 diodes contained in the CPH package currently in use, improving the mounting efficiency greatly
- The chips incorporated are both equivalent to the SB05-03C

Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$ (Value per element)

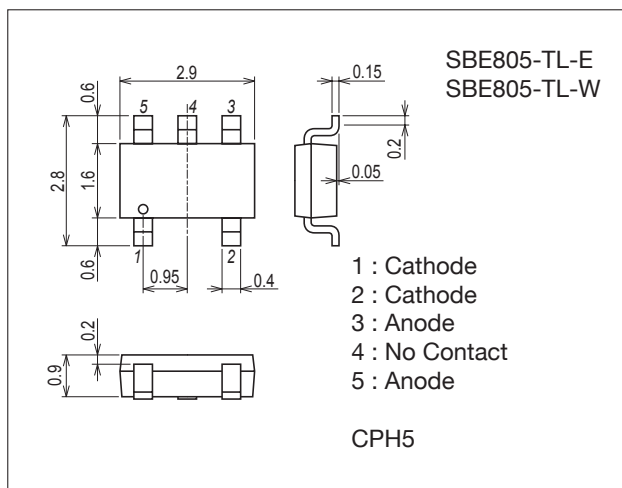
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O		500	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	5	A
Junction Temperature	T_j		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

unit : mm (typ)

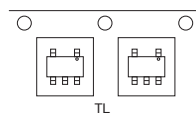
7017A-001



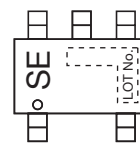
Product & Package Information

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

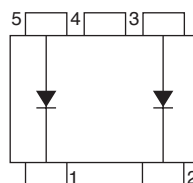
Packing Type : TL



Marking



Electrical Connection

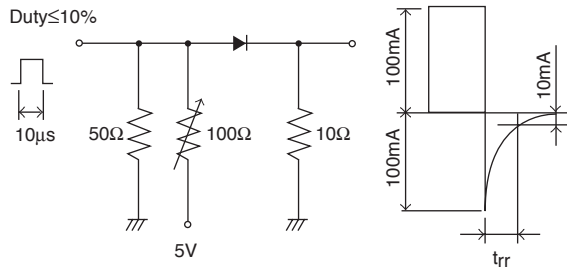


SBE805

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

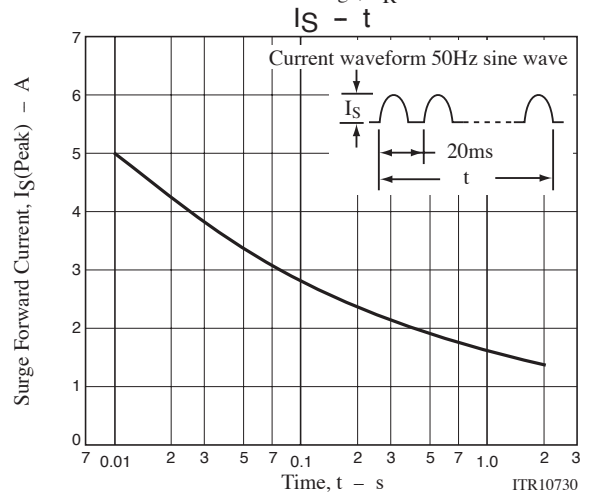
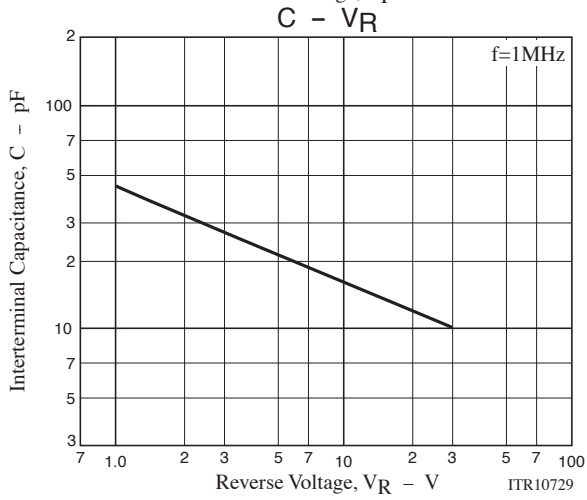
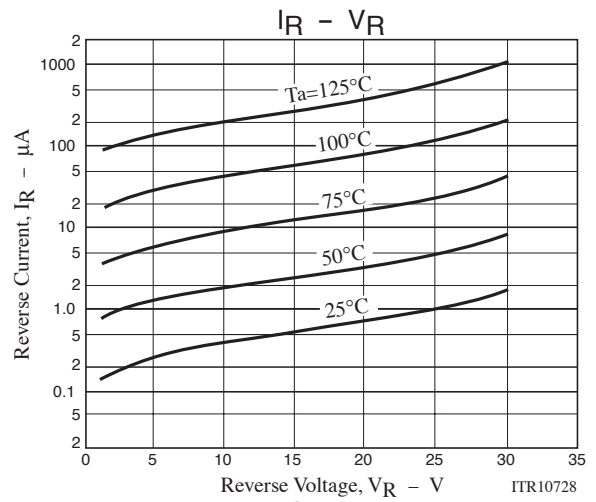
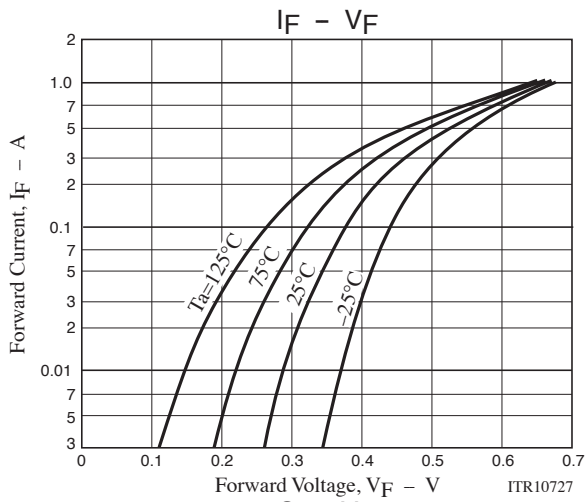
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=150\mu A$	30			V
Forward Voltage	V_F	$I_F=500mA$			0.55	V
Reverse Current	I_R	$V_R=15V$			30	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		16		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$			300		$^{\circ}C / W$

t_{rr} Test Circuit



Ordering Information

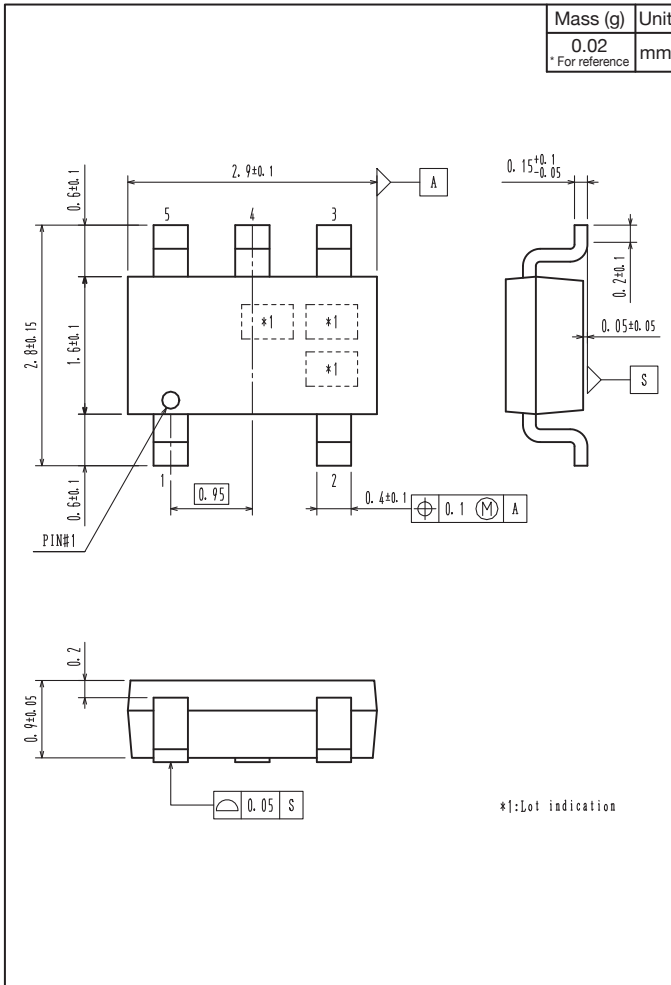
Device	Package	Shipping	memo
SBE805-TL-E	CPH5	3,000pcs./reel	Pb-Free
SBE805-TL-W			Pb-Free and Halogen Free



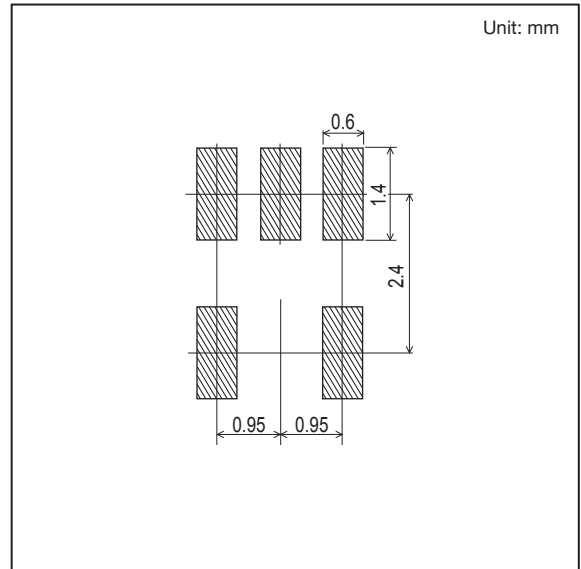
SBE805

Outline Drawing

SBE805-TL-E, SBE805-TL-W



Land Pattern Example



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