



SBE805

Schottky Barrier Diode

30V, 0.5A, Low I_R , Non-Monolithic Dual CPH5 Common Cathode

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)

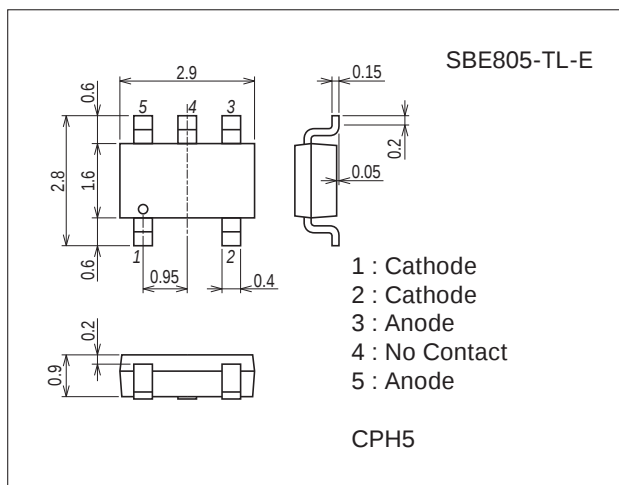
Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		30	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		35	V
Average Output Current	I_O		500	mA
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	5	A
Junction Temperature	T_j		-55 to +125	$^\circ\text{C}$
Storage Temperature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

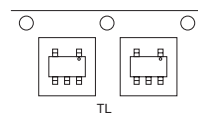
7017A-001



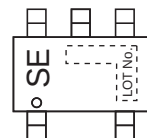
Product & Package Information

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

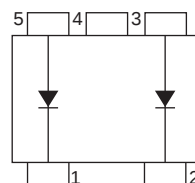
Packing Type : TL



Marking



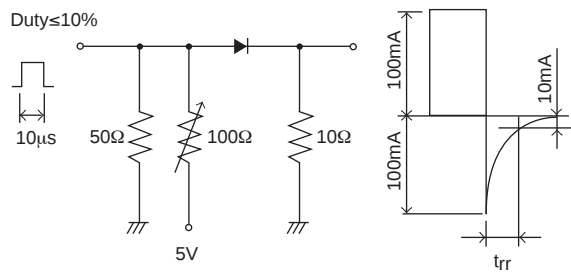
Electrical Connection



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

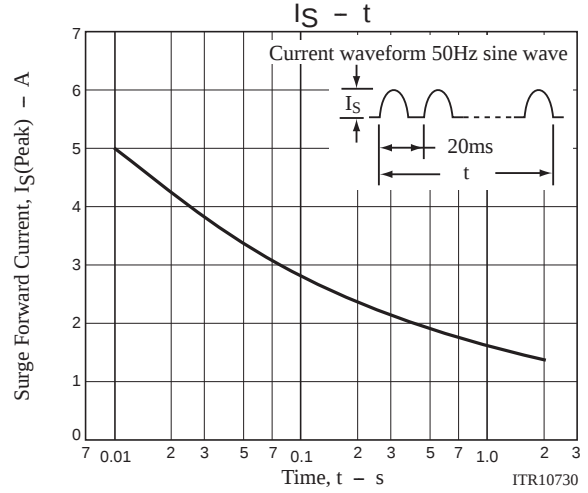
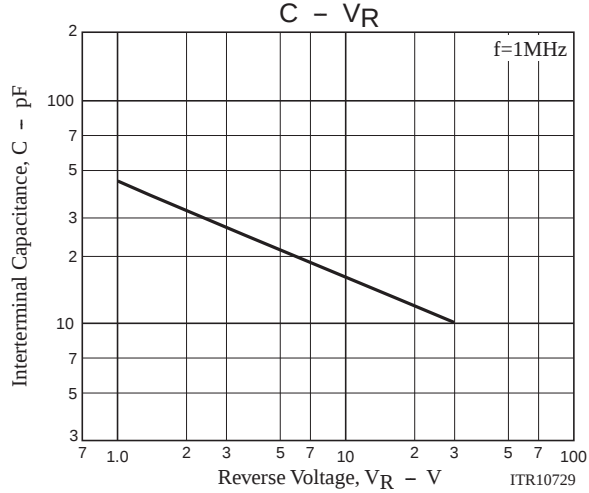
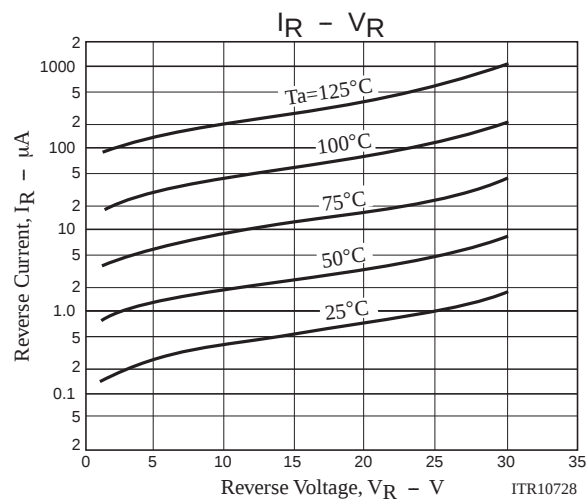
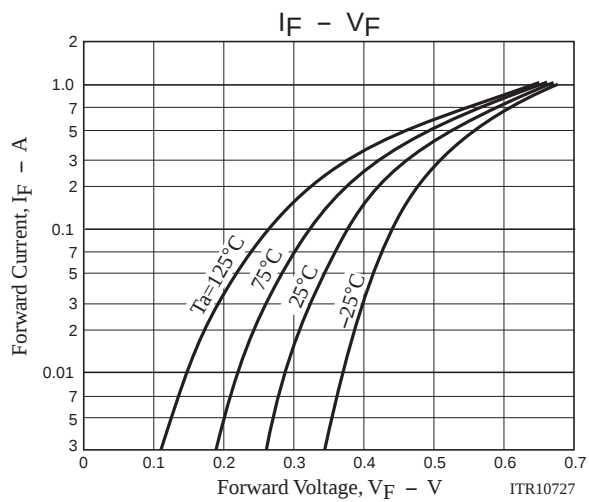
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=150\mu A$	30			V
Forward Voltage	V_F	$I_F=500mA$			0.55	V
Reverse Current	I_R	$V_R=15V$			30	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		16		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit.			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



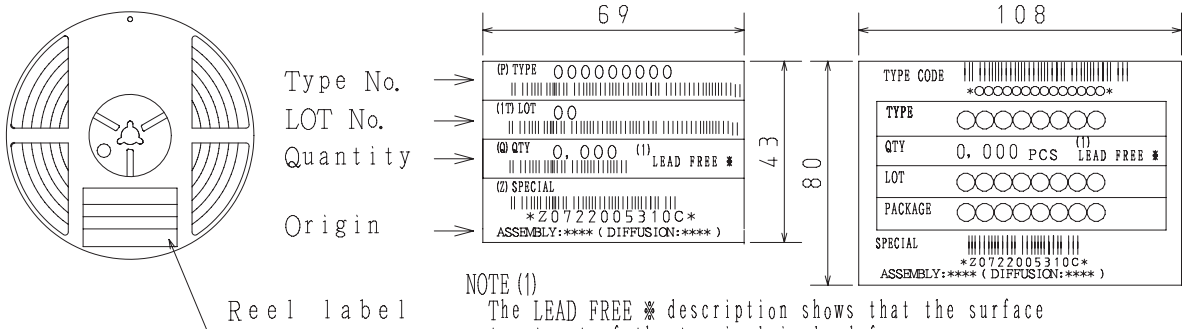
Embossed Taping Specification

SBE805-TL-E

1. Packing Format

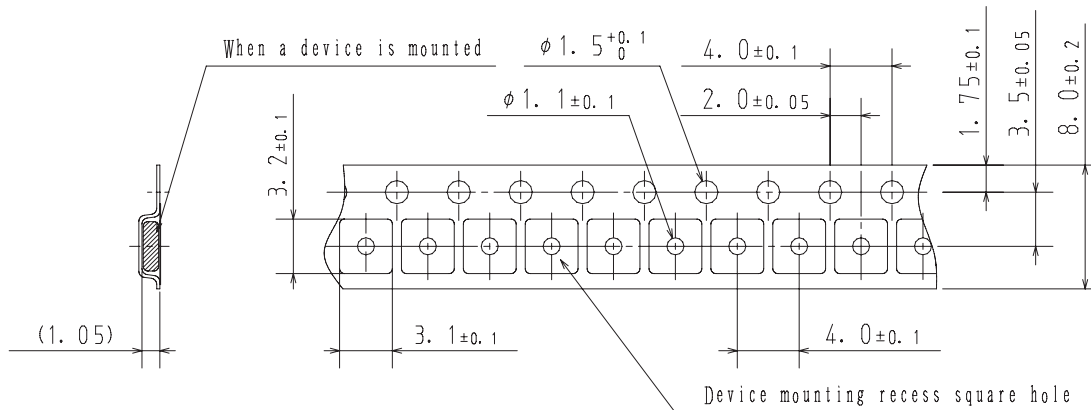
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CPH5	CPH6	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Packing method

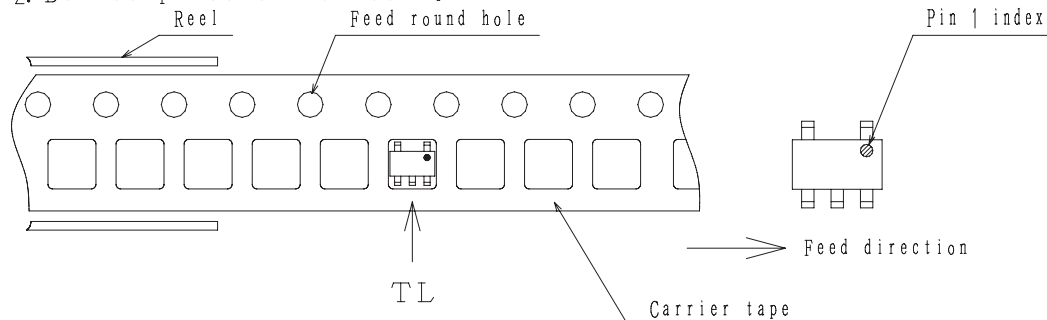


2. Taping configuration

2-1. Carrier tape size (unit:mm)

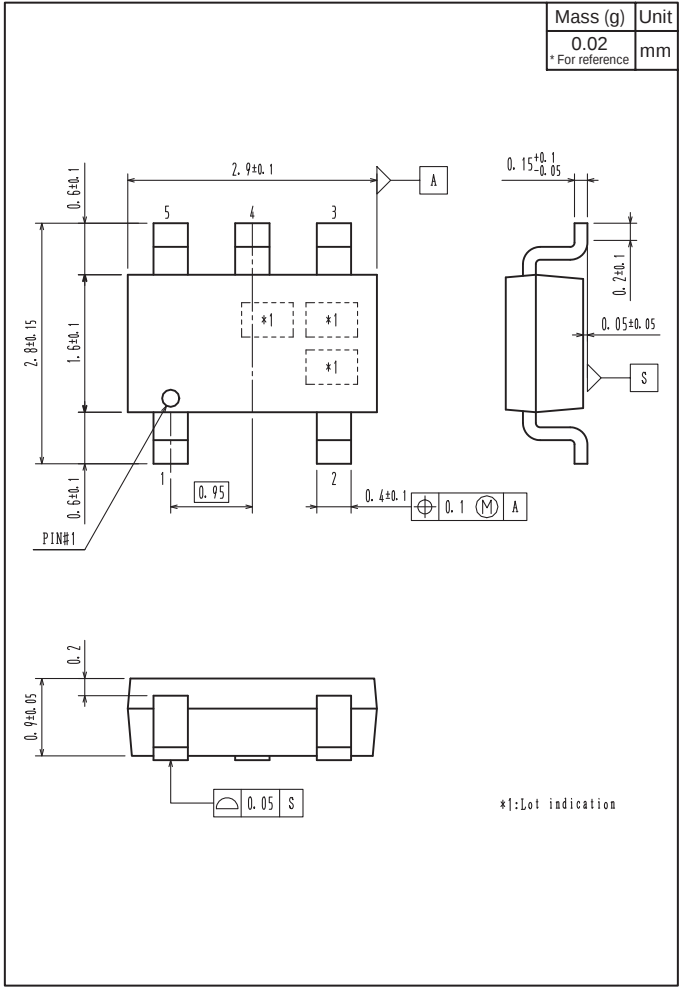


2-2. Device placement direction

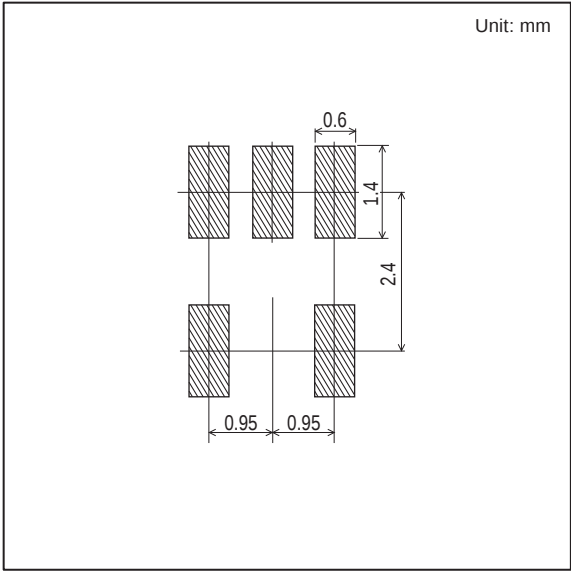


Those with pin 1 index on the feed hole side.....TL

Outline Drawing
SBE805-TL-E



Land Pattern Example



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