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# TOKEN

## (TPSDBL)

# Backlight High Voltage Inductors

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**▶ Product Introduction****Token SMD high voltage inductors with high breakdown voltage for back light applications****Features :**

- Magnetically shielded.
- Flat top for pick and place assembly.
- Ultra miniature size for high density mounting.
- Designed with heat resistant materials for reflow operation.

**Applications :**

- PDA, USB, LCD, and TFT.
- Power supply for VCRS; OA equipment Digital camera.
- LCD television set, notebook PC, portable communication Equipments.

Token (TPSDBL) low profile series is specified for backlight applications, such as PDA, USB, LCD, and TFT.

Magnetically Shielded Construction to avoid radiation, Token (TPSDBL) features high breakdown voltage, and very low direct current resistance (DCR). The height only 2.92 mm, they have a footprint of (6.6 x 4.45 mm).

The (TPSDBL) is constructed of high temperature materials that provide excellent heat deflection to prevent damage during solder reflow. Standard inductance values range from 1.00  $\mu$ H to 10000.00  $\mu$ H, DCR from 0.04 $\Omega$  to 32.8 $\Omega$ , current rating from 0.02A to 3.0A, and custom values are available on request to meet specific requirements.

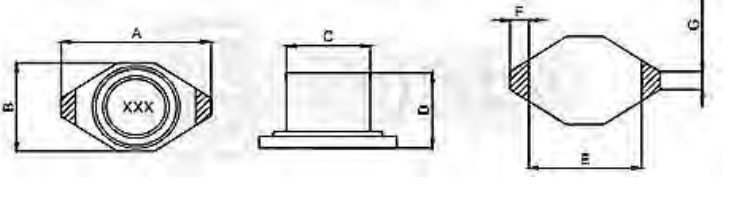

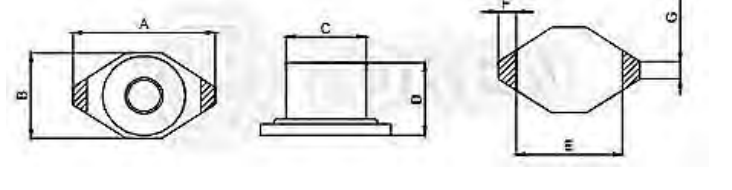

Token backlight inductors are composited with excellent heat resistant materials and flat top designed for easy pick and place assembly for reflow operation. Ultra miniature size is suitable for high density mounting.

The (TPSDBL) series are RoHS compliant with Pb-free terminations. Token will also produce devices outside these specifications to meet specific customer requirements, Please contact our sales or link to Token official website "[SMD Power Inductors](http://www.token.com.tw)" for more information.



► **Dimensions**

**Dimensions & Configurations (Unit: mm) (TPSDBL1608C/1608DT)**

Type	A Max.	B Max.	C Max.	D Max.	E Ref.	F Ref.	G Ref.
TPSDBL1608C	6.6	4.45	4.90	2.92	4.32	1.02	1.27
TPSDBL1608DT	6.6	4.45	4.90	2.92	4.32	1.02	1.27
TPSDBL1608C							
TPSDBL1608DT							

● Note: Design as Customer's Requested Specifications.

▶ TPSDBL

**Electrical Characteristics (TPSDBL-1608C/1608DT)**

Inductance (μH)		TPSDBL1608C		TPSDBL1608DT	
Marking	L (μH)	DCR (Ω) Max.	IDC (A)	DCR (Ω) Max.	IDC (A)
1R0	1.0	0.040	3.00	0.065	2.0
1R5	1.5	0.045	2.80	0.070	1.9
2R2	2.2	0.050	1.80	0.075	1.5
3R3	3.3	0.055	1.60	0.080	1.2
4R7	4.7	0.066	1.40	0.085	1.2
6R8	6.8	0.065	1.20	0.090	1.0
100	10	0.075	1.00	0.125	0.7
150	15	0.090	0.80	0.135	0.6
220	22	0.11	0.70	0.160	0.5
330	33	0.19	0.60	0.275	0.45
470	47	0.23	0.50	0.300	0.34
680	68	0.29	0.40	0.575	0.29
101	100	0.48	0.30	1.100	0.24
151	150	0.59	0.26	1.400	0.20
221	220	0.77	0.22	2.500	0.17
331	330	1.40	0.20	2.900	0.16
471	470	1.80	0.19	3.600	0.14
681	680	2.20	0.18	4.550	0.12
102	1000	3.40	0.15	8.100	0.08
152	1500	4.20	0.12		
222	2200	8.50	0.10		
332	3300	11.00	0.08		
472	4700	13.90	0.06		
682	6800	25.00	0.04		
103	10000	32.80	0.02		

Note:

- Measuring Frequency. L: <100μH (100KHz/0.25v) L: >100μH Above(1KHz/0.25v) .
- IDC: The current when the inductance becomes 35% lower than its nominal value. and temperature rise 40°C Δt=40°C (ta=20°C).



▶ **Order Codes**

**Order Codes (TPSDBL)**

TPSDBL1608C	-	1R0		M	
Part Number		Inductance		Tolerance	
TPSDBL1608C		1R0	1.00μH	J	±5%
TPSDBL1608DT		150	15.00μH	K	±10%
		101	100.00μH	L	±15%
		102	1000.00μH	M	±20%
				P	±25%
				N	±30%
				N	30%

## ► General Information

### How to Quickly Search Inductor for all of the Characteristics?

#### Quickly Search Inductor Finder

Searching and comparing data sheets of inductor manufacturers can be time consuming. Token's Parameter Sorting Search Mode allows selection of inductors based on different parameters.

By entering just the inductance value,

By sorting parameter to narrow down searching range,

Or by enter keyword / part number / size dimensions L\*W\*H to partial or exact searching.

#### Leading-Edge Technology

Token Electronics brand passive component specializes in standard and custom solutions offering the latest in state-of-the-art low profile high power density inductor components. Token provides cost-effective, comprehensive solutions that meet the evolving needs of technology-driven markets. In working closely with the industry leaders in chipset and core development, we remain at the forefront of innovation and new technology to deliver the optimal mix of packaging, high efficiency and unbeatable reliability. Our designs utilize high frequency, low core loss materials, new and custom core shapes in combination with innovative construction and packaging to provide designers with the highest performance parts available on the market.

#### Find Inductor Solutions Faster

##### Find Your Inductor - [rfq@token.com.tw](mailto:rfq@token.com.tw)

Only timely and accurate information can help manage the changing needs of your customers. The Token Inductor Finder puts you only a click away from all of the inductor information you need.

##### Find Your Solution - [rfq@token.com.tw](mailto:rfq@token.com.tw)

Selecting the correct inductor solution will not only save you time, but it will give you a competitive edge. At Token, we are committed to helping you find the most efficient alternative for your power design. Our inductor and power supply design experts can help you make that selection.

Please forward us:

- A brief description of your particular application's requirements.
- Details of an existing solution that you'd like to replace, enhance or find an alternative.
- Inquiries for feasibility to tailor a power transformer or inductor to your specific application.

We can also help you with any additional technical information you might need relating to any of our products.

**Ask Us Today**

