

Version:
July 31, 2017



(TPSRB)

EMI High-Saturation Power Inductors

Token Electronics Industry Co., Ltd.

Taiwan: No.137, Sec. 1, Zhongxing Rd., Wugu District,
New Taipei City, Taiwan, R.O.C. 24872
Tel: +886 2981 0109 Fax: +886 2988 7487

China: 12F, Zhong Xing Industry Bld., Chuang Ye Road,
Nan Shan District, Shen Zhen City,
Guang Dong, China 518054
Tel: +86 755 26055363; Fax: +86 755 26055365

[Web: www.token.com.tw](http://www.token.com.tw)

[Email: rfq@token.com.tw](mailto:rfq@token.com.tw)



▶ Product Introduction

Token Integrated E-Shield for Reduction of EMI In The Compact Case Size.

Features :

- Compact size.
- Magnetically shielded.
- Superior high Saturation for surface mounting.

Applications :

- Power supply for VCRS, OA equipment Digital camera, LCD television set, notebook PC, portable communication Equipments, DC/DC converters, etc.

The TPSRB series of wire wound, surface-mount inductor from Token Electronics is designed for general purpose inductor to eliminate EMI in power lines for telecommunications, test & measurement equipment, networking, portable electronic equipment, PCs, appliances, and other electronic devices.

Developed to increase DC to DC converter efficiency through low DC resistance, the compact inductors save valuable board space, measuring only 5.6 mm x 6.2 mm x 3.2 mm for TPSRB63, 7.0 mm x 7.8 mm x 4.5 mm for TPSRB74, 9.0 mm x 10.0 mm x 5.5 mm for TPSRB105.



The inductors are magnetically shielded to prevent interference and operate in a wide temperature range. Token Electronics offers a variety of coils and inductors, including choke coils with low DC resistance for power supply circuits. Customers can select the optimum characteristics by choosing from monolithic or wire wound construction and a wide range of inductance values and tolerances with some types offering magnetic shielding.

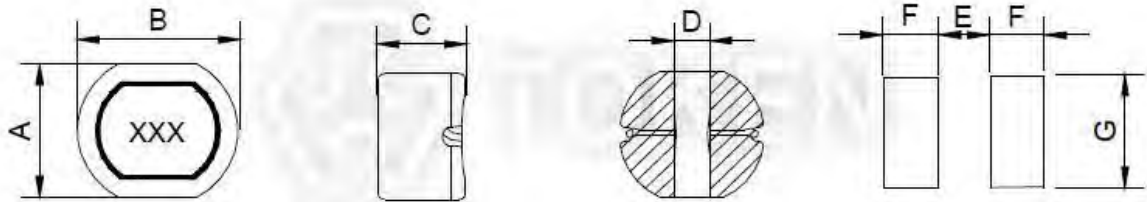
Custom parts are available on request. Token will also produce devices outside these specifications to meet specific customer requirements, Please contact our sales or link to Token official website "[SMD Power Inductors](http://www.token.com.tw)" for more information.



► **Dimensions**

Dimensions & Configurations (TPSRB)

Part NO	A±0.5	B±0.5	C±0.5	D (Ref)	E (Ref)	F (Ref)	G (Ref)
TPSRB63	5.6	6.2	3.2	1.8	1.7	2.25	5.5
TPSRB74	7.0	7.8	4.5	2.0	2.0	4.0	7.5
TPSRB105	9.0	10.0	5.5	2.8	2.5	5.0	9.5



Surface Mount (TPSRB) Dimensions (Unit: mm)

- Note: Design as Customer's Requested Specifications.

▶ **TPSRB**

Electrical Characteristics (TPSRB)

Inductance (μH)		TPSRB63		TPSRB74		TPSRB105	
Marking	L (μH)	DCR (Ω) Max.	IDC (A)	DCR (Ω) Max.	IDC (A)	DCR (Ω) Max.	IDC (A)
100	10	0.082	1.62	0.04	1.65	0.03	2.06
120	12	0.103	1.48	0.04	1.57	0.03	1.94
150	15	0.12	1.32	0.06	1.39	0.04	1.72
180	18	0.16	1.21	0.06	1.29	0.05	1.58
220	22	0.176	1.09	0.07	1.12	0.05	1.42
270	27	0.32	1.99	0.10	1.06	0.07	1.32
330	33	0.36	0.89	0.13	0.97	0.08	1.16
390	39	0.46	0.82	0.16	0.91	0.09	1.10
470	47	0.5	0.75	0.19	0.80	0.11	1.00
560	56	0.67	0.68	0.21	0.76	0.11	0.93
680	68	0.74	0.62	0.24	0.68	0.14	0.85
820	82	0.82	0.57	0.32	0.62	0.17	0.79
101	100	1.15	0.51	0.36	0.55	0.22	0.72
121	120	1.26	0.47	0.39	0.49	0.27	0.63
151	150	1.41	0.42	0.49	0.44	0.35	0.55
181	180	2.28	0.38	0.61	0.4	0.42	0.5
221	220	2.54	0.35	0.72	0.36	0.48	0.47
271	270	3.0	0.31	0.83	0.33	0.58	0.41
331	330	5.4	0.28			0.74	0.37
391	390	6.26	0.26			0.82	0.35
471	470	6.5	0.24			0.96	0.33

Note:

- Measuring Frequency. L: < 100uH 以上(100KHz/0.25v) L:> 100uH 以上(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 (TPSRB)

TPSRB63	-	100		M	
Part Number		Inductance		Tolerance	
TPSRB63		100	10.00μH	J	±5%
TPSRB74		101	100.00μH	K	±10%
TPSRB105				L	±15%
				M	±20%
				P	±25%
				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

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

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

