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(TPSLF) Low DCR High Saturation Power Inductors

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Product Introduction

Token (TPSLF) Shielded Small Footprint SMD Power Inductors Deliver Higher Inductances.

Features :

- Magnerically shielded construction.
- Excellent solderabillity and high heat resistance.
- Superior to be 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..

Token (TPSLF) inductors are a strong choice for high-density power circuitry. With ferrite drum construction and a unique geometry. (TPSLF) also feature magnetically shielded, composite construction that reduces buzz noise to ultra-low levels.

Token offers high saturation power inductor 0.01Ω low DCR value and has once again extended its (TPSLF) family of low-profile, wire wound, high-current inductors with a new device that offers the lowest direct current resistance (DCR) available in a compact (5.9mm x 5.9mm), (6.9mm x 6.9mm), (10.1mm x 10.1mm), (12.5mm x 12.5mm) package with a low 2.7mm, 3.0mm, 3.2mm, 3.4mm, 4.8mm, 5.8mm, 6.8mm, and 7.8mm height profile.

The (TPSLF) series is a high-performance, space-saving and power-saving solution for DC-DC converter applications for products such as Game machine, HDD, Notebook PC, Projector, PDA, mobile devices, notebook computers, desktop computers, and servers. Other applications include low-profile, and high-current power supplies.

The (TPSLF) inductors are RoHS compliant and meet standard requirements. Token will also produce devices outside these specifications to meet specific customer requirements and custom parts are available on request.Please contact our sales or link to Token official website “SMD Power Inductors” for more information.

Dimensions

Dimensions & Configurations (Unit: mm) (TPSLF)

PART NO	FIG	A ± 0.3	B ± 0.3	C ± 0.3	D (Ref)	E (Ref)	F (Ref)	a	b = d	c
TPSLF6025	1	5.9	5.9	2.7	0.1	0.9	2	2.2	1.5	4
TPSLF6028	1	5.9	5.9	3.0	0.1	0.9	2	2.2	1.5	4
TPSLF7028	1	6.9	6.9	3.0	0.1	0.9	2	2.2	1.5	4.9
TPSLF7030	1	6.9	6.9	3.2	0.1	0.9	2	2.2	1.5	4.9
TPSLF7032	1	6.9	6.9	3.4	0.1	0.9	2	2.2	1.5	4.9
TPSLF7045	1	6.9	6.9	4.8	0.1	0.9	2	2.2	1.5	4.9
TPSLF1045	1	10.1	10.1	4.8	0.15	2.0	3	3.2	2.5	5.6
TPSLF1205	1/2	12.5	12.5	5.8	0.1	2.0	3	3.2	2.5	8.6
TPSLF1206	1/2	12.5	12.5	6.8	0.1	2.0	3	3.2	2.5	8.6
TPSLF1207	1/2	12.5	12.5	7.8	0.1	2.0	3	3.2	2.5	8.6

FIG1

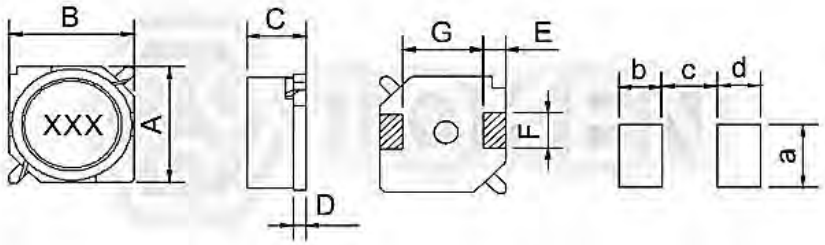
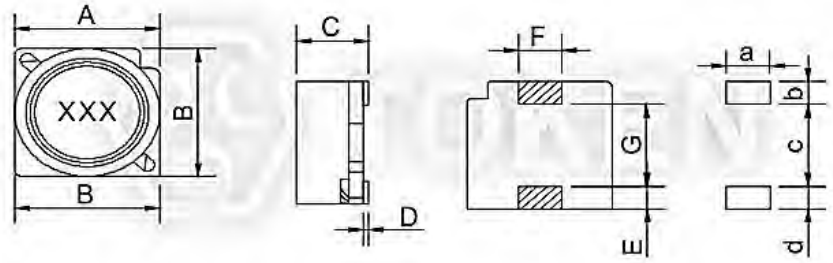


FIG2



- **Note: Design as Customer's Requested Specifications.**

TPSLF6025/6028/7028/7030/7032

Electrical Characteristics (TPSLF)

Inductance (µH)		TPSLF6025		TPSLF6028		TPSLF7028		TPSLF7030		TPSLF7032	
Marking	L (µH)	DCR (Ω) Max	IDC (A)	DCR (Ω) Max	IDC (A)	DCR (Ω) Max	IDC (A)	DCR (Ω) Max	IDC (A)	DCR (Ω) Max	IDC (A)
3R3	3.3					0.028	1.60	0.023	1.80	0.023	1.90
4R7	4.7	0.036	1.50	0.028	1.60	0.038	1.50	0.036	1.60	0.030	1.70
6R8	6.8	0.044	1.30	0.036	1.50	0.059	1.30	0.041	1.50	0.041	1.60
100	10	0.057	1.00	0.054	1.30	0.083	1.10	0.053	1.30	0.053	1.40
150	15	0.085	0.88	0.076	1.00	0.110	0.88	0.084	1.00	0.075	1.10
220	22	0.122	0.73	0.104	0.77	0.180	0.75	0.110	0.86	0.110	0.96
330	33	0.180	0.59	0.148	0.69	0.240	0.65	0.160	0.65	0.160	0.75
470	47	0.240	0.48	0.210	0.59	0.340	0.54	0.240	0.57	0.240	0.67
680	68	0.370	0.42	0.290	0.50			0.310	0.49	0.310	0.59
101	100	0.500	0.33	0.430	0.42			0.450	0.35	0.45	0.45
151	150			0.650	0.34					0.650	0.37
221	220			0.980	0.26					1.050	0.29
471	470									2.050	0.20
681	680									3.150	0.16

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℃ Δt = 40℃ (ta = 20℃).**

TPSLF7045/1045/1205/1206/1207

Electrical Characteristics (TPSLF)

Inductance (µH)		TPSLF7045		TPSLF1045		TPSLF1205		TPSLF1206		TPSLF1207	
Marking	L (µH)	DCR (Ω) Max	IDC (A)	DCR (Ω) Max	IDC (A)	DCR (Ω) Max	IDC (A)	DCR (Ω) Max	IDC (A)	DCR (Ω) Max	IDC (A)
2R7	2.7									0.010	10
3R3	3.3	0.020	2.50	0.016	4.90						
4R7	4.7	0.030	2.00								
5R6	5.6			0.022	3.80					0.012	7.8
6R8	6.8	0.036	1.70							0.014	7.2
100	10	0.039	1.30	0.037	3.00	0.025	3.40	0.021	5.00	0.016	5.5
150	15	0.052	1.10	0.043	2.40	0.026	2.80	0.024	4.2	0.019	4.7
220	22	0.061	0.90	0.060	2.10	0.031	2.30	0.032	3.50	0.027	4.0
330	33	0.096	0.82	0.082	1.60	0.042	1.90	0.041	2.80	0.040	3.2
470	47	0.125	0.75	0.100	1.40	0.062	1.60	0.058	2.40	0.053	2.7
680	68	0.175	0.60	1.40	1.20	0.084	1.30	0.079	2.00	0.078	2.0
101	100	0.25	0.50	0.200	1.00	0.117	1.10	0.123	160	0.125	1.9
151	150	0.340	0.40	0.350	0.79	0.190	0.88			0.175	1.5
221	220	0.520	0.33	0.470	0.65	0.270	0.72	0.273	1.00	0.258	1.3
471	470	1.05	0.22	1.03	0.47	0.520	0.49				
681	680	1.48	0.20	1.60	0.38	0.760	0.43				
102	1000	2.28	0.14	2.80	0.32	1.120	0.34				
152	1500			3.40	0.22	1.730	0.29				

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 (TPSLF)

TPSLF6025	-	3R3	M

Part Number
TPSLF6025
TPSLF6028
TPSLF7028
TPSLF7030
TPSLF7032
TPSLF7045
TPSLF1045
TPSLF1205
TPSLF1206
TPSLF1207

Inductance	
3R3	3.30µH
120	12.00µH
101	100.00µH
102	1000.00µH

Tolerance	
J	±5%
K	±10%
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 - wt.moc.nekot@qfr
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 - wt.moc.nekot@qfr
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