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(TPUDF)
SMD Unshielded Wirewound Inductors

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Product Introduction

Token SMD unshielded Power Wire wound Inductors (TPUDF) provide full range inductance.

Features :
- Open magnetic circuit construction.
- High Current, Low DCR.

Applications :
- Notebook, Cellular Phone.
- DC/DC converter, PDA.

(TPUDF) series metalized drum core design utilizes board space and general use by Token's automatic wire wound technology and ferrite core.

The TPUDF wire-wound open magnetic circuit constructions are particularly suitable for cost-critical mass applications and thanks to their surface-mounting capability. These material saving power inductors are ideal for applications such as storage chokes in DC/DC convertors as well as in the EMC sector.

The TPUDF series is designed for DC-DC converter applications and features reduced DC resistance and increased allowable current. In DC-DC converters and power supplies, the performance of the power components directly affects the overall efficiency of the supply, so it is of paramount importance.

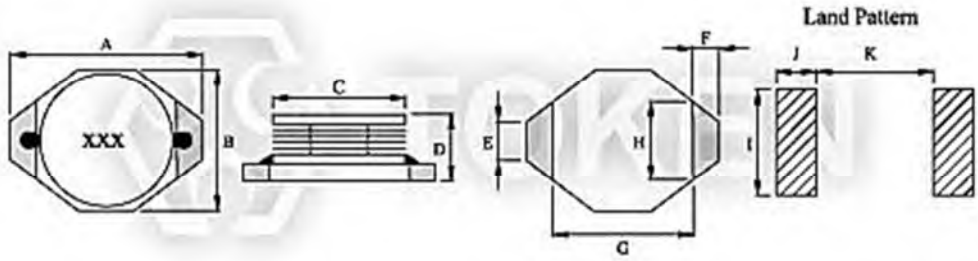
The TPUDF series features wide inductance range from 1.00 uH to 1000.00 uH. The TPU5022DF version has an insertion height of 7.11 mm with low DC resistance down to 0.009 Ohm. Available inductance values for the new TPU5022DF are from 1.00 uH to 1000.00 uH with rated current up to 20.00 A. Thanks to its temperature stability, it can be used in ambient temperatures ranging from -40℃ to +85℃.

Token SMT unshielded wire wound inductors TPUDF series conforms to the RoHS directive and Lead-free. Custom parts are available on request for tighter tolerances. Application of specific designs also available including different inductance and frequency specifications adjusted to requirements. Contact us with your specific needs. For more information, please link to Token official website "SMD Power Inductors".

Dimensions & Configurations

Dimensions & Configurations (Unit: mm) (TPU1608DF)

Type	A(Max.)	B(Max.)	C ± 0.3	D(Max.)	E ± 0.3	F ± 0.3	G ± 0.3	H ± 0.3	I	J	K
TPU1608DF	6.60	4.45	4.00	2.92	1.27	1.02	4.32	2.50	3.56	1.40	4.06



SMD Unshielded (TPU1608DF) Dimensions

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

TPU1608DF

Electrical Characteristics (TPU1608DF)

Part Number	Inductance(μH)	Test Freq.(KHz)	DCR (Ω)(Max.)	IDC (A)(Max.)
TPU1608DF - 1R0M	1.00	100	0.050	2.90
TPU1608DF - 1R5M	1.50	100	0.050	2.60
TPU1608DF - 2R2M	2.20	100	0.070	2.30
TPU1608DF - 3R3M	3.30	100	0.080	2.00
TPU1608DF - 4R7M	4.70	100	0.090	1.50
TPU1608DF - 6R8M	6.80	100	0.130	1.20
TPU1608DF - 100M	10.00	100	0.160	1.10
TPU1608DF - 150M	15.00	100	0.230	0.90
TPU1608DF - 220M	22.00	100	0.370	0.70
TPU1608DF - 330M	33.00	100	0.510	0.58
TPU1608DF - 470M	47.00	100	0.640	0.50
TPU1608DF - 680M	68.00	100	0.860	0.40
TPU1608DF - 101M	100.00	100	1.270	0.31
TPU1608DF - 151M	150.00	100	2.000	0.27
TPU1608DF - 221M	220.00	100	3.110	0.22
TPU1608DF - 331M	330.00	100	3.800	0.18
TPU1608DF - 471M	470.00	100	5.060	0.16
TPU1608DF - 681M	680.00	100	9.200	0.14
TPU1608DF - 102M	1000.00	100	13.800	0.10

- **Note: Test Freq.: 100 KHz / 0.1V.**
  Operating Temp.: -40℃ ~ +85℃.
  Inductance drop=10% typ. at IDC.

Order Codes

Order Codes (TPU1608DF)

TPU1608DF	-	100	M

Part Number
TPU1608DF

Inductance	
1R0	1.00μH
100	10.00μH
101	100.00μH
102	1000.00μH

Tolerance	
K	10%
L	15%
M	20%
N	30%

Product Introduction

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- Open magnetic circuit construction.
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Applications :
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- DC/DC converter, PDA.

(TPUDF) series metalized drum core design utilizes board space and general use by Token's automatic wire wound technology and ferrite core.

The TPUDF wire-wound open magnetic circuit construction is particularly suitable for cost-critical mass applications and thanks to their surface-mounting capability. These material saving power inductors are ideal for applications such as storage chokes in DC/DC convertors as well as in the EMC sector.

The TPUDF series is designed for DC-DC converter applications and features reduced DC resistance and increased allowable current. In DC-DC converters and power supplies, the performance of the power components directly affects the overall efficiency of the supply, so it is of paramount importance.

The TPUDF series features wide inductance range from 1.00 uH to 1000.00 uH. The TPU5022DF version has an insertion height of 7.11 mm with low DC resistance down to 0.009 Ohm. Available inductance values for the new TPU5022DF are from 1.00 uH to 1000.00 uH with rated current up to 20.00 A. Thanks to its temperature stability, it can be used in ambient temperatures ranging from -40℃ to +85℃.

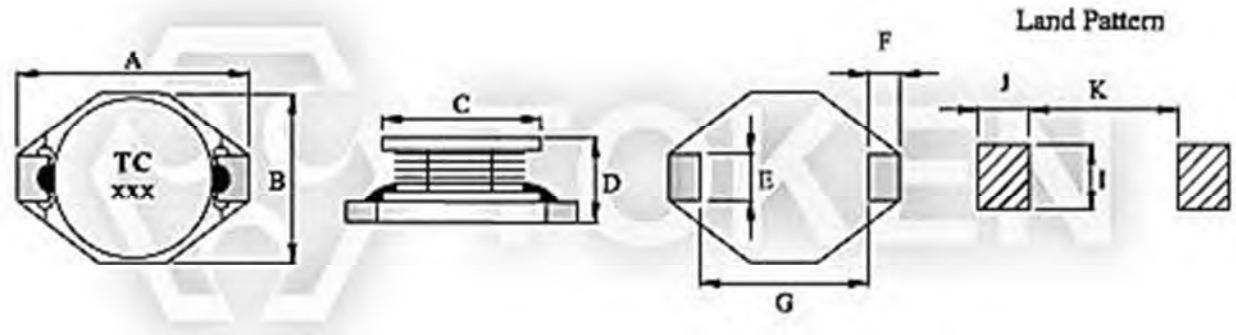
Token SMT unshielded wire wound inductors TPUDF series conforms to the RoHS directive and Lead-free. Custom parts are available on request for tighter tolerances. Application of specific designs also available including different inductance and frequency specifications adjusted to requirements. Contact us with your specific needs. For more information, please link to Token official website "SMD Power Inductors".

Dimensions & Configurations

Dim. & Conf. (Unit: mm) (TPU3308DF, TPU3316DF, TPU3340DF)

Type	A(Max.)	B(Max.)	C ± 0.3	D(Max.)	E ± 0.3	F ± 0.3	G ± 0.3	I	J	K
TPU3308DF	12.95	9.40	8.38	3.00	2.54	2.54	7.62	2.79	2.92	7.37
TPU3316DF	12.95	9.40	8.38	5.21	2.54	2.54	7.62	2.79	2.92	7.37
TPU3340DF	12.95	9.40	8.38	11.43	2.54	2.54	7.62	2.79	2.92	7.37

SMD Unshielded (TPU3340DF) Series



Surface Mount (TPU3308DF/3316DF/3340DF) Dimensions

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

TPU3308DF

Electrical Characteristics (TPU3308DF)

Part Number	Inductance(μH)	Test Freq.(KHz)	DCR (Ω)(Max.)	IDC (A)(Max.)
TPU3308DF - 100M	10.00	100	0.110	2.40
TPU3308DF - 150M	15.00	100	0.150	2.00
TPU3308DF - 220M	22.00	100	0.230	1.60
TPU3308DF - 330M	33.00	100	0.300	1.40
TPU3308DF - 470M	47.00	100	0.390	1.00
TPU3308DF - 680M	68.00	100	0.660	0.90
TPU3308DF - 101M	100.00	100	0.840	0.70
TPU3308DF - 151M	150.00	100	1.200	0.60
TPU3308DF - 221M	220.00	100	1.900	0.50
TPU3308DF - 331M	330.00	100	2.700	0.40
TPU3308DF - 471M	470.00	100	4.000	0.30
TPU3308DF - 681M	680.00	100	5.300	0.20
TPU3308DF - 102M	1000.00	100	8.400	0.10

- **Note: Test Freq.: 100 KHz / 0.1V.**
  Operating Temp.: -40℃ ~ +85℃.
  Inductance drop=10% typ. at IDC.

TPU3316DF

Electrical Characteristics (TPU3316DF)

Part Number	Inductance(μH)	Test Freq.(KHz)	DCR (Ω)(Max.)	IDC (A)(Max.)
TPU3316DF - 1R0M	1.00	100	0.009	9.00
TPU3316DF - 1R5M	1.50	100	0.010	8.00
TPU3316DF - 2R2M	2.20	100	0.012	7.00
TPU3316DF - 3R3M	3.30	100	0.015	6.40
TPU3316DF - 4R7M	4.70	100	0.018	5.40
TPU3316DF - 6R8M	6.80	100	0.027	4.60
TPU3316DF - 100M	10.00	100	0.038	3.80
TPU3316DF - 150M	15.00	100	0.046	3.00
TPU3316DF - 220M	22.00	100	0.085	2.60
TPU3316DF - 330M	33.00	100	0.100	2.00
TPU3316DF - 470M	47.00	100	0.140	1.60
TPU3316DF - 680M	68.00	100	0.200	1.40
TPU3316DF - 101M	100.00	100	0.280	1.20
TPU3316DF - 151M	150.00	100	0.400	1.00
TPU3316DF - 221M	220.00	100	0.610	0.80
TPU3316DF - 331M	330.00	100	1.020	0.60
TPU3316DF - 471M	470.00	100	1.270	0.50
TPU3316DF - 681M	680.00	100	2.020	0.40
TPU3316DF - 102M	1000.00	100	3.000	0.30

- **Note: Test Freq.: 100 KHz / 0.1V.**
  Operating Temp.: -40℃ ~ +85℃.
  Inductance drop=10% typ. at IDC.

TPU3340DF

Electrical Characteristics (TPU3340DF)

Part Number	Inductance(μH)	Test Freq.(KHz)	DCR (Ω)(Max.)	IDC (A)(Max.)
TPU3340DF - 100M	10.00	100	0.040	8.00
TPU3340DF - 150M	15.00	100	0.050	7.00
TPU3340DF - 220M	22.00	100	0.066	5.50
TPU3340DF - 330M	33.00	100	0.080	4.00
TPU3340DF - 470M	47.00	100	0.110	3.80
TPU3340DF - 680M	68.00	100	0.170	3.00
TPU3340DF - 101M	100.00	100	0.220	2.50
TPU3340DF - 151M	150.00	100	0.340	2.00
TPU3340DF - 221M	220.00	100	0.440	1.60
TPU3340DF - 331M	330.00	100	0.700	1.20
TPU3340DF - 471M	470.00	100	0.950	1.00
TPU3340DF - 681M	680.00	100	1.200	1.00
TPU3340DF - 102M	1000.00	100	2.000	0.80

- **Note: Test Freq.: 100 KHz / 0.1V.**
  Operating Temp.: -40℃ ~ +85℃.
  Inductance drop=10% typ. at IDC.

Order Codes

Order Codes (TPU3308DF, TPU3316DF, TPU3340DF)

TPU1608DF	-	100	M

Part Number
TPU3308DF, TPU3316DF, TPU3340DF

Inductance	
1R0	1.00μH
100	10.00μH
101	100.00μH
102	1000.00μH

Tolerance	
K	10%
L	15%
M	20%
N	30%

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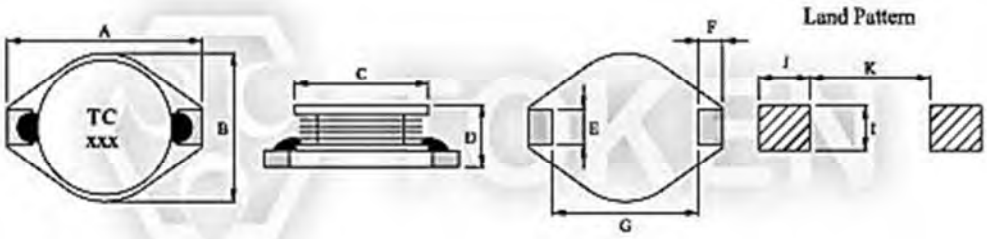
Dimensions & Configurations

Dimensions & Configurations (Unit: mm) (TPU5022DF)

Type	A(Max.)	B(Max.)	C ± 0.3	D(Max.)	E ± 0.3	F ± 0.3	G ± 0.3	I	J	K
TPU5022DF	18.54	15.24	12.70	7.11	2.54	2.54	12.70	2.79	2.92	12.45

SMD Unshielded (TPU5022DF) Series



SMD Unshielded (TPU5022DF) Dimensions

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

TPU5022DF

Electrical Characteristics (TPU5022DF)

Part Number	Inductance(μH)	Test Freq.(KHz)	DCR (Ω)(Max.)	IDC (A)(Max.)
TPU5022DF - 1R0M	1.00	100	0.009	20.00
TPU5022DF - 2R2M	2.20	100	0.014	16.00
TPU5022DF - 3R3M	3.30	100	0.015	14.00
TPU5022DF - 5R6M	5.60	100	0.020	12.00
TPU5022DF - 100M	10.00	100	0.031	10.00
TPU5022DF - 150M	15.00	100	0.036	8.00
TPU5022DF - 220M	22.00	100	0.047	7.00
TPU5022DF - 330M	33.00	100	0.066	5.50
TPU5022DF - 470M	47.00	100	0.086	4.50
TPU5022DF - 680M	68.00	100	0.130	3.50
TPU5022DF - 101M	100.00	100	0.190	3.00
TPU5022DF - 151M	150.00	100	0.250	2.60
TPU5022DF - 221M	220.00	100	0.380	2.40
TPU5022DF - 331M	330.00	100	0.560	1.90
TPU5022DF - 471M	470.00	100	0.850	1.40
TPU5022DF - 681M	680.00	100	1.100	1.20
TPU5022DF - 102M	1000.00	100	1.800	1.00

- **Note: Test Freq.: 100 KHz / 0.1V.**
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Order Codes

Order Codes (TPU5022DF)

TPU1608DF	-	100	M

Part Number	Inductance		Tolerance	
TPU5022DF	1R0	1.00μH	K	10%
	100	10.00μH	L	15%
	101	100.00μH	M	20%
	102	1000.00μH	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