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# TOKEN

## (TPUDHP)

# High Current Power Inductors

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**▶ Product Introduction**

**Token's Power Inductors utilize wire wound technology enabling up to 30A high current.**

**Features :**

- Miniature surface mount design.
- Very low resistance. Maximum power density.
- High power, High saturation inductors.

**Applications :**

- Personal computers, DC/DC Converters.
- LCD televisions, Power supply for VTRs.

Token SMD unshielded (TPUDHP) series utilize wire wound technology with open magnetic circuit construction enabling cost-effective in manufacturing high rated current, low ohmic resistance products.

The power (TPUDHP) inductors are wound around a ferrite core and are particularly suitable for cost-critical mass applications with their surface-mounting capability. These material saving (TPUDHP) inductors are ideal for applications such as storage chokes in DC/DC convertors as well as in the EMC sector.



TPU3316DHP wire wound with Mn-Zn material core rugged self-leaded construction composites for low-voltage and large-current DC-DC converter. Available inductance values for the TPU3316DHP are from 0.33  $\mu$ H to 4.70  $\mu$ H with rated current up to 20.00 A.

TPU1813DHP rugged self-leaded construction with advance wire wound technology enables large current, lower DCR, and less than 5.0mm height. It is ideal for high power DC-DC applications. Inductance values for the TPU1813DHP are from 0.18  $\mu$ H to 100  $\mu$ H with rated current up to 14 A.

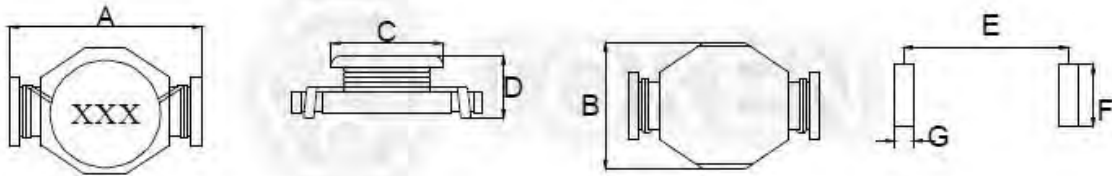
TPU5022DHP's self-leaded and open magnetic circuit construction is specified for high current applications with up to 30.00 A IDC. Inductance range from 0.78  $\mu$ H to 15.00  $\mu$ H.

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 (Unit: mm) (TPUDHP)

Type	A Max.	B Max.	C ± 0.3	D Max.	E Ref.	F Ref.	G Ref.
TPU1813DHP	8.89	6.10	4.57	5.00	6.99	4.00	1.90
TPU3316DHP	13.21	9.91	8.38	6.35	10.16	4.05	1.50
TPU5022DHP	22.35	16.26	12.7	8.00	17.53	8.65	3.20



SMD Unshielded (TPUDHP) Dimensions

Note: Design as Customer's Requested Specifications.

## ► TPU1813DHP

### Electrical Characteristics (TPU1813DHP)

Part number	Inductance (μH)	DCR (Ω) Max	SRF (MHz)	Isat (A)	Irms (A)
TPU1813DHP-R18	0.18	0.003	800	14.0	10.0
TPU1813DHP-R33	0.33	0.004	600	10.0	7.0
TPU1813DHP-R56	0.56	0.010	200	7.7	6.0
TPU1813DHP-1R2	1.2	0.017	140	5.3	4.4
TPU1813DHP-2R2	2.2	0.035	100	3.5	3.1
TPU1813DHP-3R3	3.3	0.040	80	3.0	2.7
TPU1813DHP-4R7	4.7	0.054	50	2.6	2.2
TPU1813DHP-6R8	6.8	0.080	45	2.2	1.8
TPU1813DHP-100	10	0.111	40	1.9	1.5
TPU1813DHP-150	15	0.170	30	1.5	1.2
TPU1813DHP-220	22	0.250	25	1.2	1.0
TPU1813DHP-330	33	0.350	20	0.99	0.82
TPU1813DHP-470	47	0.470	15	0.87	0.72
TPU1813DHP-680	68	0.730	10	0.67	0.56
TPU1813DHP-101	100	1.110	8	0.53	0.47

▶ **TPU3316DHP**

**Electrical Characteristics (TPU3316DHP)**

Part number	Inductance (μH)	DCR (Ω) Max	SRF (MHz)	Isat (A)	Irms (A)
TPU3316DHP-R33	0.33	0.002	300	20.0	16.0
TPU3316DHP-R68	0.68	0.005	200	13.0	12.0
TPU3316DHP-1R0	1.0	0.006	100	11.0	10.0
TPU3316DHP-1R5	1.5	0.008	90	9.0	9.0
TPU3316DHP-2R2	2.2	0.011	90	7.8	7.4
TPU3316DHP-3R3	3.3	0.014	65	6.4	5.9
TPU3316DHP-4R7	4.7	0.018	45	5.4	4.8

▶ **TPU5022DHP**

**Electrical Characteristics (TPU5022DHP)**

Part number	Inductance (μH)	DCR (Ω) Max	SRF (MHz)	Isat (A)	Irms (A)
TPU5022DHP-R78	0.78	0.0026	156	30.0	15.0
TPU5022DHP-1R5	1.5	0.0040	100	25.0	15.0
TPU5022DHP-2R2	2.2	0.0061	75	20.0	12.0
TPU5022DHP-3R3	3.3	0.0086	60	17.0	10.0
TPU5022DHP-4R7	4.7	0.014	40	13.0	8.4
TPU5022DHP-100	10	0.026	28	10.0	6.0
TPU5022DHP-150	15	0.032	20	8.0	4.4

▶ **Order Codes**

**Order Codes (TPU1813DHP)**

TPU1813DHP	-	R18		M	
Part Number		Inductance		Tolerance	
TPU1813DHP		R18	0.18μH	J	±5%
TPU3316DHP		1R2	1.20μH	K	±10%
TPU5022DHP		100	10.00μH	L	±15%
		101	100.00μH	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**

