

# Power Inductors

## SMT Inductors

## Unshielded Inductors

### ► Preview

Unshielded SMD Power Inductors Cut Down On Resistance. Token produces a wide and varied range of surface mount inductors that are ideal for all portable applications. Other application areas include: telecommunications, consumer and industrial electronics. In order to handle high rated current, SMD inductors must have a low ohmic resistance and minimal losses at high frequencies. Token (TPULF7032/7045) surface mount unshielded series are designed for high-current with lowest DCR wire-wound inductors.



With a footprint of 7.4 x 7.4 mm, the (TPULF7032) version has an insertion height of 3.5 mm. Available inductance values for the new (TPULF7032) are from 1.00 uH to 100.00 uH with rated current up to 2.88A. With inductance values from 1.00 uH to 1000.00 uH, the (TPULF7045) has a rated current up to 2.8A. Thanks to its temperature stability, it can be used in ambient temperatures ranging from -40°C ~ +85°C.

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

Token (TPULF7032/7045) series conform to the RoHS directive and Lead-free. Custom parts are available on request.

Token will also produce devices outside these specifications to meet specific customer requirements, please contact our sales for more information.

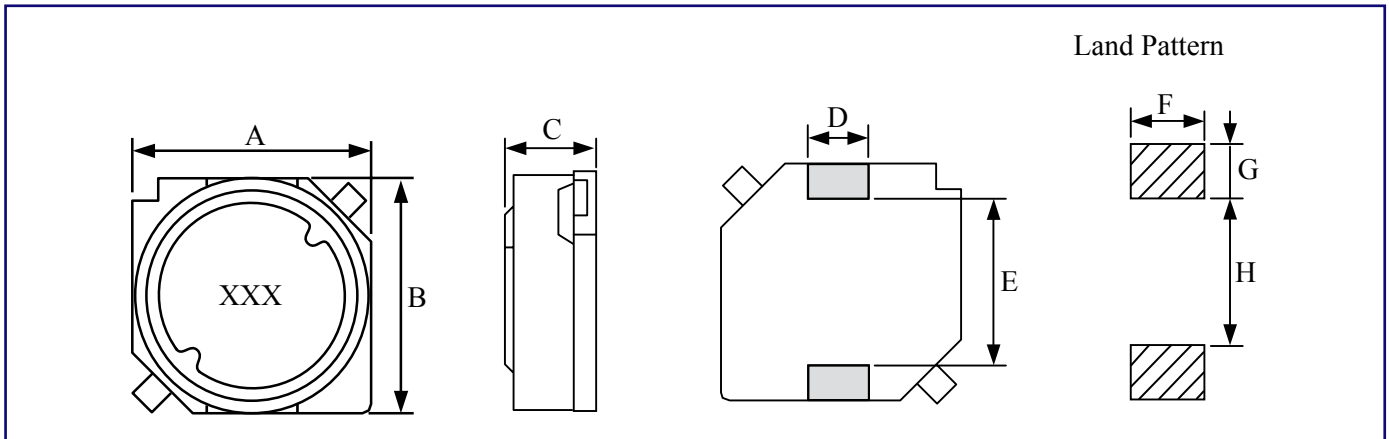
### Features :

- Low profile (3.5mm Height and 7.4mm Width max.)
- High-Current Inductor with Lowest DCR.

### Applications :

- Notebook, Portable communication equipments, DC/DC converters, etc..

**▶ Dimensions & Configurations (Unit: mm) (TPULF7032/7045)**



Type	A(max)	B(max)	C(max)	D ± 0.2	E(max)	F	G	H
TPULF7032	7.4	7.4	3.5	2.0	5.4	3.0	2.0	4.4
TPULF7045	7.4	7.4	5.1	2.0	5.4	3.0	2.0	4.4

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

**▶ Electrical Characteristics (TPULF7032)**

Part Number	Inductance (μH)	Test Freq. (KHz)	DCR (Ω) (max)	IDC (A) (max)
TPULF7032 - 1R0M	1.00	1	0.022	2.88
TPULF7032 - 1R5M	1.50	1	0.026	2.67
TPULF7032 - 2R2M	2.20	1	0.032	2.40
TPULF7032 - 3R3M	3.30	1	0.041	2.08
TPULF7032 - 4R7M	4.70	1	0.049	1.92
TPULF7032 - 6R8M	6.80	1	0.067	1.60
TPULF7032 - 100M	10.00	1	0.085	1.41
TPULF7032 - 120M	12.00	1	0.100	1.28
TPULF7032 - 150M	15.00	1	0.130	1.12
TPULF7032 - 180M	18.00	1	0.160	1.00
TPULF7032 - 220M	22.00	1	0.180	0.93
TPULF7032 - 270M	27.00	1	0.240	0.80
TPULF7032 - 330M	33.00	1	0.290	0.72
TPULF7032 - 390M	39.00	1	0.340	0.66
TPULF7032 - 470M	47.00	1	0.410	0.59
TPULF7032 - 560M	56.00	1	0.480	0.55
TPULF7032 - 680M	68.00	1	0.600	0.49
TPULF7032 - 820M	82.00	1	0.710	0.44
TPULF7032 - 101M	100.00	1	0.950	0.38

**Note:** Test Freq.: 1KHz / 0.25V.

Operating Temp.: -40°C ~ +85°C.

Inductance drop=10% typ. at IDC.

► **Electrical Characteristics (TPULF7045)**

Part Number	Inductance ( $\mu$ H)	Test Freq. (KHz)	DCR ( $\Omega$ ) (max)	IDC (A) (max)
TPULF7045 - 1R0M	1.00	1	0.023	2.880
TPULF7045 - 1R5M	1.50	1	0.028	2.560
TPULF7045 - 2R2M	2.20	1	0.032	2.360
TPULF7045 - 2R7M	2.70	1	0.035	2.360
TPULF7045 - 3R3M	3.30	1	0.038	2.160
TPULF7045 - 3R9M	3.90	1	0.042	2.160
TPULF7045 - 4R7M	4.70	1	0.049	1.880
TPULF7045 - 5R6M	5.60	1	0.055	1.880
TPULF7045 - 6R8M	6.80	1	0.060	1.680
TPULF7045 - 8R2M	8.20	1	0.067	1.680
TPULF7045 - 100M	10.00	1	0.070	1.560
TPULF7045 - 120M	12.00	1	0.080	1.440
TPULF7045 - 150M	15.00	1	0.090	1.360
TPULF7045 - 180M	18.00	1	0.100	1.280
TPULF7045 - 220M	22.00	1	0.120	1.170
TPULF7045 - 270M	27.00	1	0.140	1.070
TPULF7045 - 330M	33.00	1	0.160	1.000
TPULF7045 - 390M	39.00	1	0.190	0.910
TPULF7045 - 470M	47.00	1	0.220	0.840
TPULF7045 - 560M	56.00	1	0.290	0.720
TPULF7045 - 680M	68.00	1	0.340	0.660
TPULF7045 - 820M	82.00	1	0.460	0.580
TPULF7045 - 101M	100.00	1	0.550	0.510
TPULF7045 - 121M	120.00	1	0.670	0.420
TPULF7045 - 151M	150.00	1	0.900	0.370
TPULF7045 - 181M	180.00	1	1.050	0.350
TPULF7045 - 221M	220.00	1	1.350	0.290
TPULF7045 - 271M	270.00	1	1.550	0.280
TPULF7045 - 331M	330.00	1	2.050	0.230
TPULF7045 - 391M	390.00	1	2.300	0.215
TPULF7045 - 471M	470.00	1	2.600	0.195
TPULF7045 - 561M	560.00	1	2.900	0.185
TPULF7045 - 681M	680.00	1	3.400	0.170
TPULF7045 - 821M	820.00	1	4.200	0.165
TPULF7045 - 102M	1000.00	1	5.390	0.150

**Note:** Test Freq.: 1KHz / 0.25V.  
 Operating Temp.: -40°C ~ +85°C.  
 Inductance drop=10% typ. at IDC.

**▶ How to Order (TPULF7032/7045)**

TPULF7032

❶

1R0

❷

M

❸

❶ Part Number: TPULF7032, TPULF7045

❷ Inductance

Code	Inductance
1R0	1.00 $\mu$ H
120	12.00 $\mu$ H
121	120.00 $\mu$ H

❸ Tolerance

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

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