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DEMINT

Electronics Co., Ltd.

(TPUME)
High Frequency
Power Inductors

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Product Introduction

High frequency design, outstanding Q values, superior SRF, all packaged in DeMint (TPUME) Inductors.

Features :

- High reilbility, excellent thermal stability.
- Flat bottom surface ensures secure, reliable mounting.
- High frequency design, excellent Q values, excellent SRF.
- Provided in embossed carrier tape packaging for use with Automatic mounting machines.

Applications :

- Networking system, computer products and peripherals.
- Modems,mobile radios, cordless telephones, XDSL filter.
- Global positioning Systems, wireless communications equipment.

The DeMint (TPUME) latest devices offer the advantages of wirewound construction, and are designed with an iron core that features high saturation current and unshielded construction for high reilbility and great thermal stability.

DeMint Electronics has added new ranges of low-profile wire wound chip inductors, TPUME1206, TPUME1210L, TPUME1210, TPUME1812, and TPUME2220, for use in wireless communication equipments to increase flexibility of maximum height measurements with extended electrical characteristics.

The new (TPUME) series is designed to provide a good balance of performance and height within chip power miniature inductor offering. The TPUME1206 series is developed to have very compact footprint 3.2 mm x 2.3 mm with low profile 1.8 mm. The TPUME2220 series were developed to have a low DCR 0.039 ohm. Those TPUME family enables efficiency and flexibility.

All (TPUME) winding chip coils offer low DC resistance and large rated current. This is vital for computer product applications as it prevents energy dissipation from the chip inductor, improving the converter's overall efficiency.

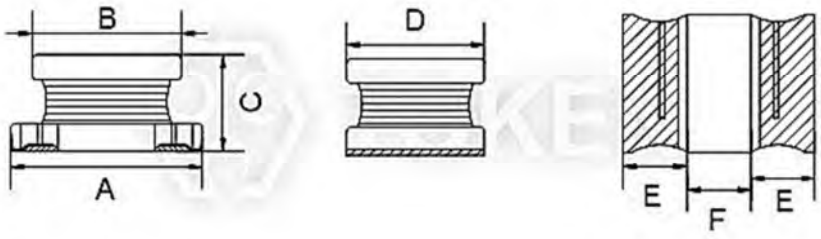
The new ranges deliver a good size/performance ratio with low DC resistances from 0.039 Ω to 66.1 Ω. A wide range of inductances is also available from 1.0 µH to 2200 µH. The parts come with high rated currents up to 4 A, and feature magnetic unshielding as standard.

Custom parts are available on request. DeMint will also produce devices outside these specifications to meet specific customer requirements. Please contact our sales or link to DeMint official website "SMD Power Inductors" for more information.

Dimensions

Dimensions & Configurations (Unit: mm) (TPUME)

Part NO	A±0.3	B±0.3	C±0.3	D Ref.	E Ref.	F Ref.
TPUME1206	3.2	2.3	1.8	1.6	0.9	1.3
TPUME1210L	3.2	2.5	1.55	2.5	0.9	1.3
TPUME1210	3.2	2.5	2.0	2.5	0.9	1.3
TPUME1812	4.5	3.6	2.6	3.2	1.6	1.3
TPUME2220	5.7	5.0	4.7	5.0	2.0	1.7



SMD power winding inductor (TPUME) Dimensions (Unit: mm)

TPUME

Electrical Specification (TPUME)

Inductance (μH)		TPUME1206		TPUME1210L		TPUME1210		TPUME1812		TPUME2220	
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)
1R0	1.0	0.104	0.175	0.06	1.48	0.057	0.445	0.045	0.5	0.039	4.00
1R2	1.2	0.118	0.165			0.064	0.425	0.048	0.5	0.042	3.8
1R5	1.5	0.157	0.155			0.079	0.4	0.057	0.5	0.049	3.7
1R8	1.8	0.196	0.050	0.101	1.31	0.088	0.39	0.06	0.5		
2R2	2.2	0.260	0.14	0.125	1.25	0.096	0.37	0.072	0.5	0.062	3.2
2R7	2.7	0.29	0.135			0.129	0.32	0.081	0.5	0.069	3
3R3	3.3	0.33	0.13	0.16	1.08	0.153	0.3	0.088	0.5	0.075	2.9
3R9	3.9	0.35	0.125			0.166	0.29	0.094	0.5	0.086	2.8
4R7	4.7	0.4	0.12	0.236	0.98	0.222	0.27	0.111	0.5	0.103	2.7
5R6	5.6	0.54	0.115	0.287	0.9	0.233	0.25	0.13	0.5	0.118	2.4
6R8	6.8	0.59	0.11	0.371	0.79	0.3	0.24	0.16	0.45	0.126	2.00
8R2	8.2	0.82	0.105	0.471	0.72	0.38	0.225	0.191	0.45	0.14	1.8
100	10	0.97	0.1	0.576	0.66	0.43	0.19	0.225	0.4	0.159	1.7
120	12	1.03	0.095	0.684	0.59	0.48	0.18	0.25	0.38	0.187	1.5
150	15	1.14	0.09	0.888	0.54	0.64	0.17	0.31	0.36	0.21	1.4
180	18	1.27	0.085	1.087	0.48	0.87	0.165	0.38	0.34	0.26	1.3
220	22	1.52	0.085	1.343	0.43	0.98	0.15	0.43	0.32	0.3	1.2
270	27	2.09	0.085			1.11	0.125	0.56	0.3	0.36	1.1
330	33	2.51	0.085	2.245	0.35	1.51	0.115	0.62	0.27	0.42	0.9
390	39	3.6	0.085			1.64	0.11	0.79	0.24	0.51	0.85
470	47	4.1	0.085	3.064	0.29	2.15	0.1	0.9	0.22	0.56	0.8
560	56	4.54	0.08	4.12	0.27	2.55	0.085	1.11	0.2	0.69	0.7
680	68	5.03	0.08	5.289	0.24	2.86	0.08	1.24	0.68	0.79	0.64
820	82	5.64	0.08	7.223	0.2	3.25	0.07	1.59	0.17	0.98	0.6
101	100	6.3	0.08	8.209	0.19	4.6	0.08	1.78	0.16	1.02	0.56
121	120	13.39	0.07	10.888	0.17	6.84	0.075	2.43	0.15	1.27	0.5
151	150	14.75	0.07	12.568	0.16	7.79	0.07	2.7	0.13	1.44	0.42
181	180	16.16	0.07	19.645	0.14	8.55	0.065	3.03	0.12	1.83	0.37
221	220	24.33	0.05	22.307	0.13	9.58	0.065	4.25	0.11	2.51	0.32
271	270	29.7	0.011	24.613	0.12	10.88	0.065	5.72	0.1	2.72	0.29
331	330	43.06	0.01	28.213	0.11	16.80	0.065	6.49	0.095	3.56	0.27
391	390	51	0.009	32.187	0.1	17.9	0.05	7.22	0.09	3.99	0.25
471	470	53.5	0.008	48.474	0.09	19.4	0.045	8.27	0.08	5.2	0.24
561	560			53.893	0.08	24.2	0.04	11.67	0.07	5.74	0.22
681	680			63.013	0.07			13.13	0.065	6.75	0.19
821	820	66.1	0.005					14.43	0.06	8.56	0.17
102	1000							19.37	0.05	9.56	0.15
122	1200							23.8	0.045	13.1	0.12
152	1500							26.5	0.04	14.8	0.1
182	1800							30.8	0.035	19.0	0.1
222	2200							48.8	0.03	20.3	0.09

Note:

- **Measuring Frequency. L: <100μH Above(100KHz/0.25v) L:>100μH Above(1KHz/0.25v).**
- **IDC:The current when the inductance becomes 10% lower than its nominal value.(ta=20°C).**

Order Codes

Order Codes (TPUME)

TPUME1206	-	1R0	M

Part Number
TPUME1206
TPUME1210L
TPUME1210
TPUME1812
TPUME2220

Inductance	
1R0	1.00µH
100	10.00µH
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. DeMint'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

DeMint 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. DeMint 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@direct-token.com

Only timely and accurate information can help manage the changing needs of your customers. The DeMint Inductor Finder puts you only a click away from all of the inductor information you need.

Find Your Solution - rfq@direct-token.com

Selecting the correct inductor solution will not only save you time, but it will give you a competitive edge. At DeMint, 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