

**RoHS
Compliant**



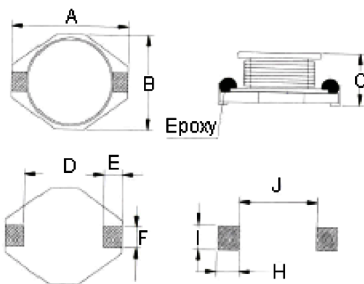
Features

- High power, high saturation inductors.
- Ideal inductors for DC-DC converters in notebook computer, PDAs, step-up or step-down converters, flash memory programmers etc.
- MCPD1608 used ceramic base with gold-plating.
- The others used LCP plastic base.

Applications

- Portable telephones.
- Personal computers.
- DC/DC converters, etc.
- Other various electronic appliances.

Diagram



Dimensions

Type	A Maximum	B Maximum	C Maximum	D	E	F	H	I	J
MCPD1608	6.6	4.45	2.92	4.32	1.27	1.02	3.56	1.4	4.06
MCPD1813	8.89	6.1	4.7	5	2	1.5	3.5	2.2	4.8
MCPD3308	12.95	9.4	3	7.62	2.54	2.54	2.79	2.92	7.37
MCPD3316	12.95	9.4	5.21	7.62	2.54	2.54	2.79	2.92	7.37
MCPD3340	12.95	9.4	11.43	7.62	2.54	2.54	2.79	2.92	7.37
MCPD5022	18.54	15.24	7.11	12.7	2.54	2.54	2.79	2.92	12.45

Dimensions : Millimetres

Inductance and Rated Current Ranges

MCPD1608	1 μ H to 1000 μ H	2.9A to 0.1A
MCPD1813	0.18 μ H to 100 μ H	14A to 0.53A
MCPD3308	4.7 μ H to 1000 μ H	4.2A to 0.29A
MCPD3316	1 μ H to 1000 μ H	9A to 0.3A
MCPD3340	0.47 μ H to 1000 μ H	40A to 0.8A
MCPD5022	1 μ H to 1000 μ H	20A to 1A

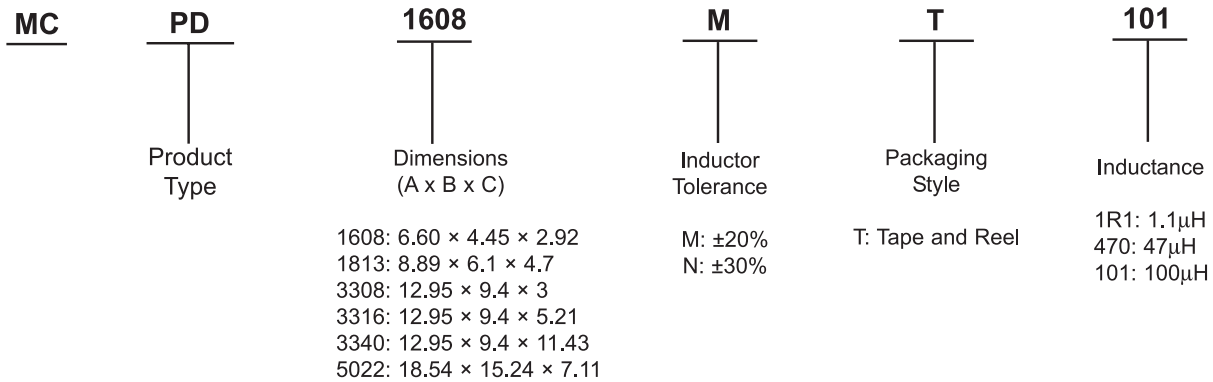
Electrical Specifications at 25°C

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

Characteristics

Saturation Rated Current : The current when the inductance becomes 10% lower than its initial value. (Ta = 25°C).
 Operating Temperature Range : -40°C to 85°C

Part Number Identification



Electrical Characteristics

MCPD1608 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) Maximum	IDC (A) Maximum
1R0	1	M	100kHz, 0.1V	0.05	2.9
1R5	1.5	M	100kHz, 0.1V	0.06	2.6
2R2	2.2	M	100kHz, 0.1V	0.07	2.3
3R3	3.3	M	100kHz, 0.1V	0.08	2
4R7	4.7	M	100kHz, 0.1V	0.09	1.5
6R8	6.8	M	100kHz, 0.1V	0.13	1.2
8R2	8.2	M	100kHz, 0.1V	0.16	1.15
100	10	M	100kHz, 0.1V	0.16	1.1
150	15	M	100kHz, 0.1V	0.23	0.9
220	22	M	100kHz, 0.1V	0.37	0.7
330	33	M	100kHz, 0.1V	0.51	0.58
470	47	M	100kHz, 0.1V	0.64	0.5
680	68	M	100kHz, 0.1V	0.86	0.4
101	100	M	100kHz, 0.1V	1.27	0.31
151	150	M	100kHz, 0.1V	2	0.27
221	220	M	100kHz, 0.1V	3.11	0.22
331	330	M	100kHz, 0.1V	3.8	0.18
471	470	M	100kHz, 0.1V	5.06	0.16
681	680	M	100kHz, 0.1V	9.2	0.14
102	1000	M	100kHz, 0.1V	13.8	0.1

MCPD1813 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) Maximum	IDC (A) Maximum
R18	0.18	N	100kHz, 0.1V	0.007	14.0
R33	0.33	N	100kHz, 0.1V	0.008	10.0
R56	0.56	N	100kHz, 0.1V	0.01	7.7
1R2	1.2	N	100kHz, 0.1V	0.017	5.3
2R2	2.2	N	100kHz, 0.1V	0.035	3.5
3R3	3.3	N	100kHz, 0.1V	0.04	3.0
4R7	4.7	N	100kHz, 0.1V	0.064	2.6
6R8	6.8	N	100kHz, 0.1V	0.08	2.2
100	10	M	100kHz, 0.1V	0.111	1.9
150	15	M	100kHz, 0.1V	0.17	1.5
220	22	M	100kHz, 0.1V	0.25	1.2
330	33	M	100kHz, 0.1V	0.35	0.99
470	47	M	100kHz, 0.1V	0.47	0.87
680	68	M	100kHz, 0.1V	0.73	0.67
101	100	M	100kHz, 0.1V	1.11	0.53

MCPD3308 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) Maximum	IDC (A) Maximum
4R7	4.7	M	100kHz, 0.1V	0.036	4.20
6R8	6.8	M	100kHz, 0.1V	0.060	3.90
100	10	M	100kHz, 0.1V	0.085	2.70
150	15	M	100kHz, 0.1V	0.12	2.30
220	22	M	100kHz, 0.1V	0.18	1.80
330	33	M	100kHz, 0.1V	0.25	1.60
470	47	M	100kHz, 0.1V	0.32	1.30
680	68	M	100kHz, 0.1V	0.54	1.10
101	100	M	100kHz, 0.1V	0.69	0.87
151	150	M	100kHz, 0.1V	0.94	0.74
221	220	M	100kHz, 0.1V	1.60	0.56
331	330	M	100kHz, 0.1V	2.15	0.50
471	470	M	100kHz, 0.1V	3.30	0.40
681	680	M	100kHz, 0.1V	4.40	0.33
102	1000	M	100kHz, 0.1V	7.00	0.29

MCPD3316 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) Maximum	IDC (A) Maximum
1R0	1	M	100kHz, 0.1V	0.009	9
1R5	1.5	M	100kHz, 0.1V	0.01	8
2R2	2.2	M	100kHz, 0.1V	0.012	7
3R3	3.3	M	100kHz, 0.1V	0.015	6.4
4R7	4.7	M	100kHz, 0.1V	0.018	5.4
6R8	6.8	M	100kHz, 0.1V	0.027	4.6
100	10	M	100kHz, 0.1V	0.038	3.8
150	15	M	100kHz, 0.1V	0.046	3
220	22	M	100kHz, 0.1V	0.085	2.6
330	33	M	100kHz, 0.1V	0.1	2
470	47	M	100kHz, 0.1V	0.14	1.6
680	68	M	100kHz, 0.1V	0.2	1.4
101	100	M	100kHz, 0.1V	0.28	1.2
151	150	M	100kHz, 0.1V	0.4	1
221	220	M	100kHz, 0.1V	0.61	0.8
331	330	M	100kHz, 0.1V	1.02	0.6
471	470	M	100kHz, 0.1V	1.27	0.5
681	680	M	100kHz, 0.1V	2.02	0.4
102	1000	M	100kHz, 0.1V	3	0.3

MCPD3340 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) Maximum	IDC (A) Maximum
R47	0.47	N	100kHz, 0.1V	0.008	40
R82	0.82	N	100kHz, 0.1V	0.009	34.7
1R2	1.2	N	100kHz, 0.1V	0.01	28.4
1R5	1.5	N	100kHz, 0.1V	0.01	25.7
2R2	2.2	N	100kHz, 0.1V	0.012	23
3R5	3.5	N	100kHz, 0.1V	0.015	21
4R7	4.7	N	100kHz, 0.1V	0.02	18
5R6	5.6	N	100kHz, 0.1V	0.022	16
6R8	6.8	N	100kHz, 0.1V	0.03	15
8R2	8.2	N	100kHz, 0.1V	0.033	10
100	10	M	100kHz, 0.1V	0.04	8
150	15	M	100kHz, 0.1V	0.05	7
220	22	M	100kHz, 0.1V	0.066	5.5

MCPD3340 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) Maximum	IDC (A) Maximum
330	33	M	100kHz, 0.1V	0.08	4
470	47	M	100kHz, 0.1V	0.11	3.8
680	68	M	100kHz, 0.1V	0.17	3
101	100	M	100kHz, 0.1V	0.22	2.5
151	150	M	100kHz, 0.1V	0.34	2
221	220	M	100kHz, 0.1V	0.44	1.6
331	330	M	100kHz, 0.1V	0.7	1.2
471	470	M	100kHz, 0.1V	0.95	1
681	680	M	100kHz, 0.1V	1.2	1
102	1000	M	100kHz, 0.1V	2	0.8

MCPD5022 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) Maximum	IDC (A) Maximum
1R0	1	M	100kHz, 0.1V	0.009	20
2R2	2.2	M	100kHz, 0.1V	0.014	16
3R3	3.3	M	100kHz, 0.1V	0.018	14
5R6	5.6	M	100kHz, 0.1V	0.02	12
100	10	M	100kHz, 0.1V	0.031	10
150	15	M	100kHz, 0.1V	0.036	8
220	22	M	100kHz, 0.1V	0.047	7
330	33	M	100kHz, 0.1V	0.066	5.5
470	47	M	100kHz, 0.1V	0.095	4.5
680	68	M	100kHz, 0.1V	0.13	3.5
101	100	M	100kHz, 0.1V	0.19	3
151	150	M	100kHz, 0.1V	0.25	2.6
221	220	M	100kHz, 0.1V	0.380	2.4
331	330	M	100kHz, 0.1V	0.560	1.9
471	470	M	100kHz, 0.1V	0.850	1.4
681	680	M	100kHz, 0.1V	1.100	1.2
102	1000	M	100kHz, 0.1V	1.800	1.0

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