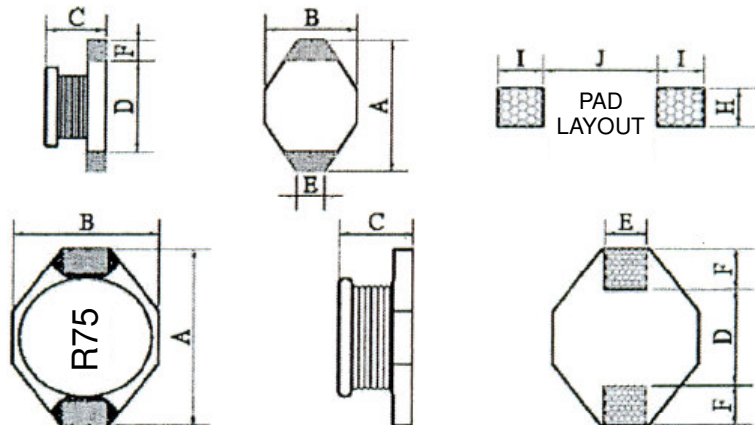
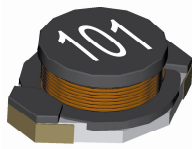


## SMD Power Inductor – PD



### 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.
- PD1608 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

### Characteristics

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

### Dimensions

Unit: mm

Type	A max.	B max.	C max.	D	E	F	H	I	J
PD1608	6.60	4.45	2.92	4.32	1.27	1.02	3.56	1.40	4.06
PD1813	8.89	6.10	4.70	5.00	2.00	1.50	3.50	2.20	4.80
PD3308	12.95	9.40	3.00	7.62	2.54	2.54	2.79	2.92	7.37
PD3316	12.95	9.40	5.21	7.62	2.54	2.54	2.79	2.92	7.37
PD3340	12.95	9.40	11.43	7.62	2.54	2.54	2.79	2.92	7.37
PD5022	18.54	15.24	7.11	12.7	2.54	2.54	2.79	2.92	12.45

### Inductance and rated current ranges

- PD1608 1.0μH~1000μH 2.9~0.10A
- PD1813 0.18μH~100μH 14~0.53A
- PD3308 4.7μH~1000μH 4.2~0.29A
- PD3316 1.0μH~1000μH 9.0~0.30A
- PD3340 0.47μH~1000μH 40~0.8A
- PD5022 1.0μH~1000μH 20~1.0A
- Test equipment:  
L: HP4284A LCR meter  
DCR: Milli-ohm meter
- Electrical specifications at 25°C

### Product Identification

PD	1608	M	T	101
Product Type	Dimensions (AxBxC)	Inductor Tolerance	Packaging Style	Inductance
	1608: 6.60×4.45×2.92 1813: 8.89×6.1×4.7 3308: 12.95×9.40×3.00 3316: 12.95×9.40×5.21 3340: 12.95×9.40×11.43 5022: 18.54×15.24×7.11	M: ±20% N: ±30%	T: Tape and Reel	1R1: 1.1μH 470: 47μH 101: 100μH

## Electrical Characteristics

PD1608 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω)	IDC (A)
1R0	1.0	M	100KHz, 0.1V	0.05	2.90
1R5	1.5	M	100KHz, 0.1V	0.06	2.60
2R2	2.2	M	100KHz, 0.1V	0.07	2.30
3R3	3.3	M	100KHz, 0.1V	0.08	2.00
4R7	4.7	M	100KHz, 0.1V	0.09	1.50
6R8	6.8	M	100KHz, 0.1V	0.13	1.20
8R2	8.2	M	100KHz, 0.1V	0.16	1.15
100	10	M	100KHz, 0.1V	0.16	1.10
150	15	M	100KHz, 0.1V	0.23	0.90
220	22	M	100KHz, 0.1V	0.37	0.70
330	33	M	100KHz, 0.1V	0.51	0.58
470	47	M	100KHz, 0.1V	0.64	0.50
680	68	M	100KHz, 0.1V	0.86	0.40
101	100	M	100KHz, 0.1V	1.27	0.31
151	150	M	100KHz, 0.1V	2.00	0.27
221	220	M	100KHz, 0.1V	3.11	0.22
331	330	M	100KHz, 0.1V	3.80	0.18
471	470	M	100KHz, 0.1V	5.06	0.16
681	680	M	100KHz, 0.1V	9.20	0.14
102	1000	M	100KHz, 0.1V	13.8	0.10

PD1813 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω)	IDC (A)
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	0.010	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	0.040	3.0
4R7	4.7	N	100KHz, 0.1V	0.064	2.6
6R8	6.8	N	100KHz, 0.1V	0.080	2.2
100	10	M	100KHz, 0.1V	0.111	1.9
150	15	M	100KHz, 0.1V	0.170	1.5
220	22	M	100KHz, 0.1V	0.250	1.2
330	33	M	100KHz, 0.1V	0.350	0.99
470	47	M	100KHz, 0.1V	0.470	0.87
680	68	M	100KHz, 0.1V	0.730	0.67
101	100	M	100KHz, 0.1V	1.110	0.53

PD3308 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω)	IDC (A)
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

## Electrical Characteristics

### PD3316 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω)	IDC (A)
1R0	1.0	M	100KHz, 0.1V	0.009	9.00
1R5	1.5	M	100KHz, 0.1V	0.010	8.00
2R2	2.2	M	100KHz, 0.1V	0.012	7.00
3R3	3.3	M	100KHz, 0.1V	0.015	6.40
4R7	4.7	M	100KHz, 0.1V	0.018	5.40
6R8	6.8	M	100KHz, 0.1V	0.027	4.60
100	10	M	100KHz, 0.1V	0.038	3.80
150	15	M	100KHz, 0.1V	0.046	3.00
220	22	M	100KHz, 0.1V	0.085	2.60
330	33	M	100KHz, 0.1V	0.100	2.00
470	47	M	100KHz, 0.1V	0.140	1.60
680	68	M	100KHz, 0.1V	0.200	1.40
101	100	M	100KHz, 0.1V	0.280	1.20
151	150	M	100KHz, 0.1V	0.400	1.00
221	220	M	100KHz, 0.1V	0.610	0.80
331	330	M	100KHz, 0.1V	1.020	0.60
471	470	M	100KHz, 0.1V	1.270	0.50
681	680	M	100KHz, 0.1V	2.020	0.40
102	1000	M	100KHz, 0.1V	3.000	0.30

### PD3340 Type

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω)	IDC (A)
R47	0.47	N	100KHz, 0.1V	0.008	40.0
R82	0.82	N	100KHz, 0.1V	0.009	34.7
1R2	1.2	N	100KHz, 0.1V	0.010	28.4
1R5	1.5	N	100KHz, 0.1V	0.010	25.7
2R2	2.2	N	100KHz, 0.1V	0.012	23.0
3R5	3.5	N	100KHz, 0.1V	0.015	21.0
4R7	4.7	N	100KHz, 0.1V	0.020	18.0
5R6	5.6	N	100KHz, 0.1V	0.022	16.0
6R8	6.8	N	100KHz, 0.1V	0.030	15.0
8R2	8.2	N	100KHz, 0.1V	0.033	10.0
100	10	M	100KHz, 0.1V	0.040	8.00
150	15	M	100KHz, 0.1V	0.050	7.00
220	22	M	100KHz, 0.1V	0.066	5.50
330	33	M	100KHz, 0.1V	0.080	4.00
470	47	M	100KHz, 0.1V	0.11	3.80
680	68	M	100KHz, 0.1V	0.17	3.00
101	100	M	100KHz, 0.1V	0.22	2.50
151	150	M	100KHz, 0.1V	0.34	2.00
221	220	M	100KHz, 0.1V	0.44	1.60
331	330	M	100KHz, 0.1V	0.70	1.20
471	470	M	100KHz, 0.1V	0.95	1.00
681	680	M	100KHz, 0.1V	1.20	1.00
102	1000	M	100KHz, 0.1V	2.00	0.80

## ■ Electrical Characteristics

PD5022 Type

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ )	IDC (A)
1R0	1.0	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	0.020	12
100	10	M	100KHz, 0.1V	0.031	10
150	15	M	100KHz, 0.1V	0.036	8.0
220	22	M	100KHz, 0.1V	0.047	7.0
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	0.130	3.5
101	100	M	100KHz, 0.1V	0.190	3.0
151	150	M	100KHz, 0.1V	0.250	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