

Features:

- Provides high power and high saturation
- PD1608 uses ceramic base with gold-plating. All others use LCP plastic base
- Operating temperature range of -40°C to +125°C
- Materials meet UL94-V0 compliance
- Contact factory for inductance values outside those listed in the datasheet



Applications:

- Portable telephones
- DC/DC Converters
- LCD televisions
- Personal computers
- Flash memory programmers
- Power supplies

Inductance and Current Ranges

Type	Inductance (μH)	Range (A)
PD1608	1 ~ 1000	2.9 ~ 0.1
PD1813	0.18 ~ 100	14 ~ 0.53
PD3308	4.7 ~ 1000	4.2 ~ 0.29
PD3316	1 ~ 1000	9 ~ 0.3
PD3340	0.47 ~ 1000	40 ~ 0.8
PD5022	1 ~ 1000	20 ~ 1

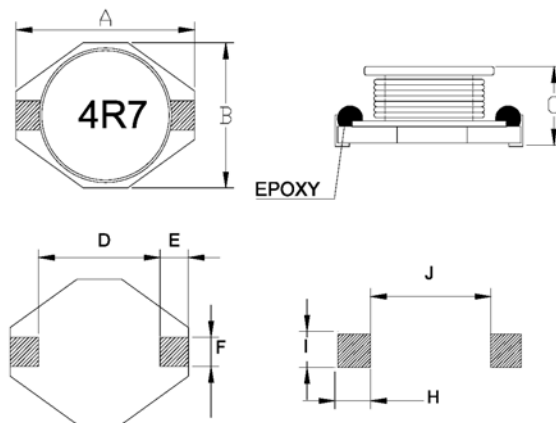
Electrical specifications at 25°C

Performance Characteristics

Saturation Rated Current	The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
Operating Temperature Range	-40 ~ 125°C

How to Order

1	2	3	4	5	6	7	8	9	10	11
P	D	1	8	1	3	M	T	1	0	1
Product Series		Code	Dimensions (mm)	Tolerance		Packaging			Inductance	
PD	SMD Unshielded Power Inductor	1608	6.6 x 4.45 x 2.92	Code	Tol	Code	Description	Size	Quantity	1R1 1.1μH
		1813	8.89 x 6.1 x 4.7	M	±20%	T	13" Tape and Reel	1618	2,000	470 47μH
		3308	12.95 x 9.4 x 3	N	±30%			1813	1,000	101 100μH
		3316	12.95 x 9.4 x 5.21					3308		
		3340	12.95 x 9.4 x 11.43					3316		
		5022	18.54 x 15.24 x 7.11					3340	225	
								5022	250	



Mechanical Specifications

Type / Code	A Max.	B Max.	C Max.	D	E	F	H	I	J	Units
PD1608	0.260 6.60	0.175 4.45	0.115 2.92	0.170 4.32	0.050 1.27	0.040 1.02	0.140 3.56	0.055 1.40	0.160 4.06	inches mm
PD1813	0.350 8.89	0.240 6.10	0.185 4.70	0.197 5.00	0.079 2.00	0.059 1.50	0.138 3.50	0.087 2.20	0.189 4.80	inches mm
PD3308	0.510 12.95	0.370 9.40	0.118 3.00	0.300 7.62	0.100 2.54	0.100 2.54	0.110 2.79	0.115 2.92	0.290 7.37	inches mm
PD3316	0.510 12.95	0.370 9.40	0.205 5.21	0.300 7.62	0.100 2.54	0.100 2.54	0.110 2.79	0.115 2.92	0.290 7.37	inches mm
PD3340	0.510 12.95	0.370 9.40	0.450 11.43	0.300 7.62	0.100 2.54	0.100 2.54	0.110 2.79	0.115 2.92	0.290 7.37	inches mm
PD5022	0.730 18.54	0.600 15.24	0.280 7.11	0.500 12.70	0.100 2.54	0.100 2.54	0.110 2.79	0.115 2.92	0.490 12.45	inches mm

Electrical Characteristics – PD1608

Code	Inductance (μ h)	Tolerance	Test Condition	DCR (Ω) Max	IDC (A) Max.
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

Electrical Characteristics - PD 1813

Code	Inductance (μh)	Tolerance	Test Condition	DCR (Ω) Max	IDC (A) Max.
R18	0.18	N	100KHz, 0.1V	0.007	14
R33	0.33	N	100KHz, 0.1V	0.008	10
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
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

Electrical Characteristics – PD3308

Code	Inductance (μh)	Tolerance	Test Condition	DCR (Ω) Max	IDC (A) Max.
4R7	4.7	M	100KHz, 0.1V	0.036	4.2
6R8	6.8	M	100KHz, 0.1V	0.06	3.9
100	10	M	100KHz, 0.1V	0.085	2.7
150	15	M	100KHz, 0.1V	0.12	2.3
220	22	M	100KHz, 0.1V	0.18	1.8
330	33	M	100KHz, 0.1V	0.25	1.6
470	47	M	100KHz, 0.1V	0.32	1.3
680	68	M	100KHz, 0.1V	0.54	1.1
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	1.6	0.56
331	330	M	100KHz, 0.1V	2.15	0.5
471	470	M	100KHz, 0.1V	3.3	0.4
681	680	M	100KHz, 0.1V	4.4	0.33
102	1000	M	100KHz, 0.1V	7	0.29

Electrical Characteristics – PD 3316

Code	Inductance (µh)	Tolerance	Test Condition	DCR (Ω) Max	IDC (A) Max.
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

Electrical Characteristics – PD3340

Code	Inductance (µh)	Tolerance	Test Condition	DCR (Ω) Max	IDC (A) Max.
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
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

Electrical Characteristics – PD5022					
Code	Inductance (μh)	Tolerance	Test Condition	DCR (Ω) Max	IDC (A) Max.
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	0.38	2.4
331	330	M	100KHz, 0.1V	0.56	1.9
471	470	M	100KHz, 0.1V	0.85	1.4
681	680	M	100KHz, 0.1V	1.1	1.2
102	1000	M	100KHz, 0.1V	1.8	1