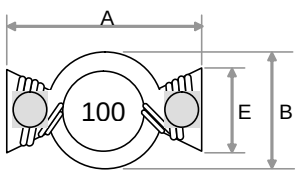
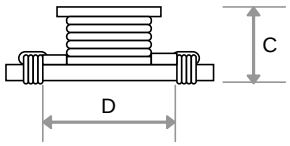
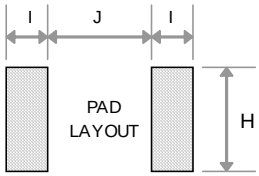
SMD Power Inductor—PDH







■Features

- —Miniature surface mount design
- —High power, High saturation inductors
- —Very low resistance
- —Maximum power density
- —Ideal inductors for DC-DC converters
- —Available on tape and reel for auto surface mounting

■Applications

- —Notebook Computers
- —Handheld Communications
- —LCD Televisions
- —Power Supply For VTRs
- —DC/DC Converters, etc.

■Characteristics

- —Saturation Rated Current :The current when the inductance becomes 30% 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	H	I	J
PDH1608	7.50	5.20	3.20	4.60	2.5	4.00	2.0	4.00
PDH1813	8.89	6.40	5.00	5.84	2.6	4.06	2.0	5.08
PDH3316	13.20	9.90	6.35	9.50	4.5	6.50	2.3	9.00
PDH4920	19.40	13.30	6.80	12.7	6.6	8.00	3.8	11.70
PDH5022	22.35	16.26	8.00	16.0	8.0	8.64	4.3	14.35

■Inductance and rated current ranges

- —PDH1608 0.47μH～22.0μH 7.7～0.70A
- —PDH1813 0.56μH～100μH 7.7～0.53A
- —PDH3316 0.47μH～100μH 11.4～0.95A
- —PDH4920 0.47μH～100μH 25.1～1.80A
- —PDH5022 0.78μH～1000μH 30.0～0.4A
- —Electrical specifications at 25°C

■Product Identification

PDH	1813	M	T	101
Product Type	Dimensions (AxBxC)	Inductor Tolerance	Packaging Style	Inductance
	1608: 7.5×5.2×3.2 1813: 8.89×6.4×5.0 3316: 13.2×9.9×6.35 4920: 19.4×13.3×6.8 5022: 22.35×16.26×8.0	M: 20% P: +40%-20%	T: Tape and Reel	1R1: 1.1μH 470: 47μH 101: 100μH

■Electrical Characteristics

PDH1608 / 1813 / 3316 / 4920 / 5022 TYPE

Codes	L (μH)	Tolerance			Test Condition	DCR (Ω) max.					IDC (A) max.				
		1608	1813 5022	3316 4920		1608	1813	3316	4920	5022	1608	1813	3316	4920	5022
R47	0.47	P	-	P	100KHz, 0.1V	0.025	-	0.005	0.003	-	7.7	-	11.4	25.1	-
R56	0.56	-	M	-	100KHz, 0.1V	-	0.010	-	-	-	-	7.7	-	-	-
R78	0.78	-	M	-	100KHz, 0.1V	-	-	-	-	0.003	-	-	-	-	30
1R0	1.0	M	-	P	100KHz, 0.1V	0.050	-	0.006	0.004	-	2.9	-	9.9	15.3	-
1R5	1.5	M	M	P	100KHz, 0.1V	0.050	-	0.008	0.006	0.004	2.6	-	7.9	12	25
2R2	2.2	M	M	M	100KHz, 0.1V	0.070	0.035	0.011	0.008	0.006	2.3	3.5	6.1	10.2	20
3R3	3.3	M	M	M	100KHz, 0.1V	0.080	0.040	0.014	0.009	0.009	2	3	5.1	9.3	17
3R9	3.9	-	M	-	100KHz, 0.1V	-	-	-	-	0.010	-	-	-	-	15
4R7	4.7	M	M	M	100KHz, 0.1V	0.090	0.054	0.018	0.012	0.014	1.5	2.6	4.2	7.7	13
6R0	6.0	-	M	-	100KHz, 0.1V	-	-	-	-	0.017	-	-	-	-	12
6R8	6.8	M	M	M	100KHz, 0.1V	0.130	0.08	0.027	0.019	-	1.2	2.2	3.6	6.2	-
7R8	7.8	-	M	-	100KHz, 0.1V	-	-	-	-	0.018	-	-	-	-	11
100	10	M	M	M	100KHz, 0.1V	0.160	0.111	0.038	0.027	0.026	1.1	1.9	3.3	5.2	10
150	15	M	M	M	100KHz, 0.1V	0.230	0.170	0.045	0.032	0.032	0.9	1.5	2.4	4.3	8
220	22	M	M	M	100KHz, 0.1V	0.370	0.250	0.070	0.050	0.043	0.7	1.2	2	3.7	7
330	33	-	M	M	100KHz, 0.1V	-	0.350	0.100	0.069	0.066	-	0.99	1.7	3	6
470	47	-	M	M	100KHz, 0.1V	-	0.470	0.150	0.109	0.096	-	0.87	1.4	2.4	5
680	68	-	M	M	100KHz, 0.1V	-	0.730	0.220	0.156	0.115	-	0.68	1.2	2	4
101	100	-	M	M	100KHz, 0.1V	-	1.110	0.280	0.206	0.165	-	0.53	0.95	1.8	3
221	220	-	M	-	100KHz, 0.1V	-	-	-	-	0.396	-	-	-	-	4
331	330	-	M	-	100KHz, 0.1V	-	-	-	-	0.588	-	-	-	-	1
471	470	-	M	-	100KHz, 0.1V	-	-	-	-	0.950	-	-	-	-	0.8
681	680	-	M	-	100KHz, 0.1V	-	-	-	-	1.200	-	-	-	-	0.5
102	1000	-	M	-	100KHz, 0.1V	-	-	-	-	1.600	-	-	-	-	0.4