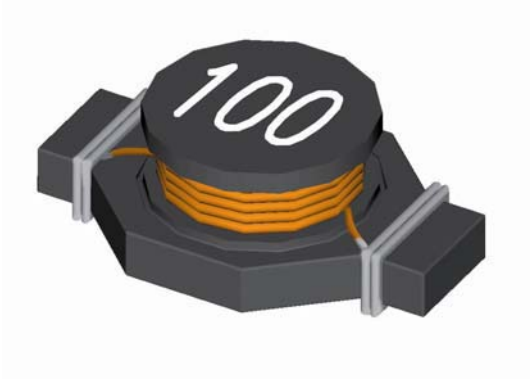
SMD Power Inductor –PDH



Applications

- Notebook computers.
- Handheld communications.
- LCD televisions.
- Power supply for VTRs.
- DC/DC converters, etc.

Features

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

Inductance and rated current ranges

- PDH1608 0.47μH~22μH 6.0~0.70A
- PDH1813 0.47μH~100μH 6.0~0.47A
- PDH3316 0.47μH~100μH 10.6~0.95A
- PDH4920 0.47μH~100μH 16.0~1.4A
- PDH5022 0.47μH~100μH 19.2~2.0A

Product Identification

PDH	1813	M	T	101
(1)	(2)	(3)	(4)	(5)

(1)Type: SMD Power Inductors

(2) Dimensions(mm): 1608=7.5×5.2, 1813=9.0×6.1, 3316=13.2×9.9, 4920=19.4×13.3, 5022=22.2×15.0

(3) Tolerance: M=20%, P=+40%-20%

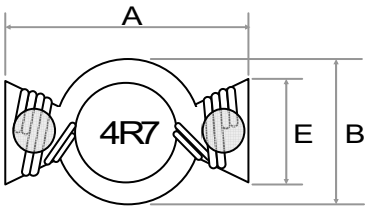
(4) Packaging style: T (Tape and Reel)

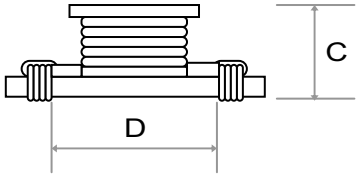
(5) Inductance: 1R1=1.1μH, 470=47μH, 101 =100mH

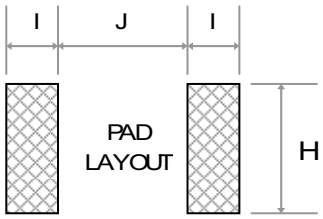
Characteristics:

- Saturation Rated Current (I sat): The current when the inductance becomes 30%lower then its initial value. (Ta=25℃)
- Temperature Rise Current (I rms): The actual current when temperature of coil becomes △40℃. (Ta=25℃)
- Operating temperature range: -40～85℃.

Dimension







Unit: mm

Codes	A max	B max	C max	D	E	H	I	J
PDH1608	7.5	5.2	3.2	4.6	2.5	4.0	2.0	4.0
PDH1813	9.0	6.1	5.0	5.8	3.0	5.0	2.0	5.0
PDH3316	13.2	9.9	6.0	9.5	4.5	6.5	2.3	9.0
PDH4920	19.4	13.3	6.8	12.7	6.6	8.0	3.8	11.7
PDH5022	22.2	15.0	7.8	14.6	7.7	10.0	4.3	13.5

Electrical Characteristics

PDH 1608/1813/ 3316 / 4920 / 5022 TYPE

Part No.	Tol.	L (μH)	DC Resistance (Max) (mΩ)					Rated DC Current (A) Max									
								I rms					I sat				
			1608	1813	3316	4920	5022	1608	1813	3316	4920	5022	1608	1813	3316	4920	5022
R47	P	0.47	25	10	5.0	3.0	2.0	6.0	6.0	10.6	16.0	19.2	7.7	7.7	11.4	25.1	51.7
1R0	P^	1.00	50	18	7.0	4.0	3.0	2.9	4.4	9.3	12.5	17.3	2.9	5.3	9.9	15.3	37.8
1R5	P^	1.50	50	20	9.0	6.0	4.0	2.8	4.2	8.3	10.0	13.4	2.6	4.5	7.9	12.0	28.9
2R2	M	2.20	70	37	11	8.0	5.0	2.4	3.1	7.2	9.2	12.0	2.3	3.5	6.1	10.2	23.7
3R3	M	3.30	80	43	13	9.0	6.0	2.0	2.9	6.5	8.0	11.0	2.0	3.0	5.1	9.3	20.2
4R7	M	4.70	90	55	17	12	10	1.5	2.2	5.5	6.5	8.6	1.5	2.6	4.2	7.7	15.6
6R8	M	6.80	130	90	21	19	15	1.4	1.7	5.0	5.8	8.3	1.2	2.2	3.6	6.2	14.1
100	M	10.0	160	111	28	27	20	1.1	1.5	4.3	4.3	6.8	1.1	1.9	3.3	5.2	11.5
150	M	15.0	230	175	41	32	30	1.0	1.2	3.5	3.9	5.5	0.9	1.5	2.4	4.3	9.1
220	M	22.0	370	255	62	50	40	0.8	1.0	2.8	3.1	4.5	0.7	1.2	2.0	3.7	7.6
330	M	33.0	-	367	92	69	60	-	0.82	2.1	2.4	3.7	-	0.99	1.7	3.0	6.1
470	M	47.0	-	474	139	109	74	-	0.72	1.7	1.9	3.1	-	0.87	1.4	2.4	5.2
680	M	68.0	-	750	179	156	120	-	0.58	1.5	1.6	2.4	-	0.67	1.2	2.0	4.3
101	M	100	-	1110	271	206	170	-	0.47	1.2	1.4	2.0	-	0.53	0.95	1.8	3.6

^ **PDH1608 1.0uH~22uH: M:±20%**

∗ **Measuring Freq: 100KHz 0.25V**

Test equipment:

L: HP4284A LCR meter.

DCR: Milli-ohm meter.

Electrical specifications at 25℃.

RoHS