PWD 05xx Series SMD Unshielded Power Inductor

Features

- Small size and low profile.
- Open magnetic circuit.
- Competitive cost solution.

Applications

- DC/DC buck, Boost application.
- Ideally used in Notebook PC，LCD TV, DVD，Game machine, STB, Projector etc.

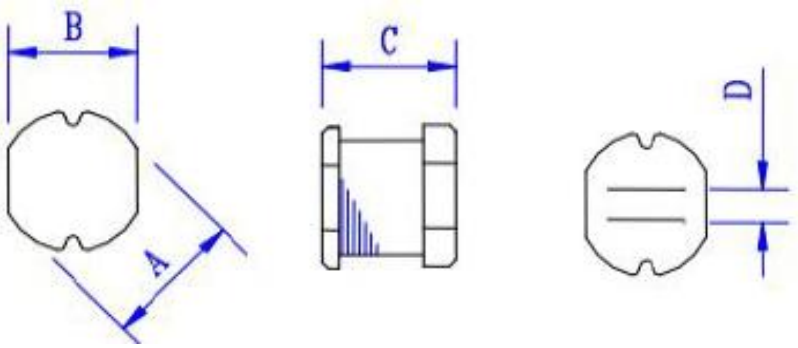
Yint P/N Information

①	②	③	④	⑤	⑥	⑦
PW	D	0503	-100	M	0	T

① Product series
② Material
③ Size
④ Inductance
⑤ Tolerance
⑥ Special code
⑦ Taping information

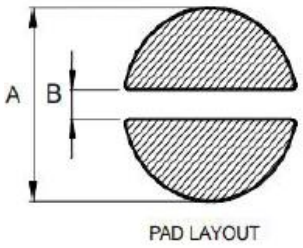
④	Nominal Inductance[μH]
Example	Nominal Value[μH]
R15	0.15 μH
1R0	1.0 μH
100	10 μH
⑤	Inductance Tolerance
K	±10%
M	±20%

Shape & Dimension information



Dimensions in mm

Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
PWD0503	5.8±0.3	5.2±0.3	3.8Max	2.0 Typ.
PWD0504	5.8±0.3	5.2±0.3	4.8Max	2.0 Typ.

TYPE	A	B
PWD0503	6.0	1.8
PWD0504	6.0	1.8

PWD 05xx Series SMD Unshielded Power Inductor

Specification

Yint P/N	Inductance	DC Resistance	Saturation Current
	L0 (μH)	DCR (mΩ)	Isat (A)
	1MHz, 1V	Max.	Typ.
PWD0503-1R0M0T	1.0	16.5	3.70
PWD0503-2R2M0T	2.2	25.0	2.85
PWD0503-3R3M0T	3.3	39.5	2.40
PWD0503-3R9M0T	3.9	46.0	2.25
PWD0503-4R7M0T	4.7	52.0	1.90
PWD0503-5R6M0T	5.6	58.0	1.88
PWD0503-6R8M0T	6.8	71.2	1.87
PWD0503-8R2M0T	8.2	80.6	1.82
PWD0503-100M0T	10	93.6	1.78
PWD0503-120M0T	12	126.0	1.60
PWD0503-150M0T	15	139.0	1.58
PWD0503-180M0T	18	160.0	1.30
PWD0503-220M0T	22	192.4	1.29
PWD0503-270M0T	27	242.0	1.10
PWD0503-330M0T	33	325.0	0.95
PWD0503-390M0T	39	369.0	0.92
PWD0503-470M0T	47	435.5	0.82
PWD0503-560M0T	56	552.5	0.80
PWD0503-680M0T	68	628.0	0.76
PWD0503-101M0T	100	848.0	0.615
PWD0503-121M0T	120	1030	0.60
PWD0503-151M0T	150	1440	0.48
PWD0503-181M0T	180	1640	0.43
PWD0503-221M0T	220	2080	0.37
PWD0503-331M0T	330	3710	0.30
PWD0503-471M0T	470	4420	0.235
PWD0503-681M0T	680	6420	0.21

PWD 05xx Series SMD Unshielded Power Inductor

Yint P/N	Inductance	DC Resistance	Saturation Current
	L0 (μH)	DCR (mΩ)	Isat (A)
	-	Max.	Typ.
PWD0504-1R2M0T	1.2	13.0	5.4
PWD0504-1R5M0T	1.5	16.9	4.7
PWD0504-1R8M0T	1.8	19.5	4.5
PWD0504-2R2M0T	2.2	22.1	4.0
PWD0504-3R3M0T	3.3	31.2	3.7
PWD0504-4R7M0T	4.7	52.0	3.1
PWD0504-5R6M0T	5.6	54.6	2.8
PWD0504-6R8M0T	6.8	60.0	2.4
PWD0504-8R2M0T	8.2	65.0	2.0
PWD0504-100M0T	10	76.0	1.42
PWD0504-120M0T	12	85.0	1.38
PWD0504-150M0T	15	105	1.28
PWD0504-180M0T	18	125	1.22
PWD0504-220M0T	22	150	1.10
PWD0504-270M0T	27	188	0.95
PWD0504-330M0T	33	215	0.86
PWD0504-470M0T	47	355	0.71
PWD0504-560M0T	56	377	0.66
PWD0504-680M0T	68	390	0.60
PWD0504-820M0T	82	416	0.57
PWD0504-101M0T	100	611	0.51
PWD0504-121M0T	120	754	0.47
PWD0504-151M0T	150	845	0.38
PWD0504-181M0T	180	1040	0.36
PWD0504-221M0T	220	1450	0.34
PWD0504-271M0T	270	1510	0.31
PWD0504-331M0T	330	1760	0.28
PWD0504-391M0T	390	2080	0.26
PWD0504-471M0T	470	2990	0.24

PWD 05xx Series SMD Unshielded Power Inductor

Yint P/N	Inductance	DC Resistance	Saturation Current
	L0 (μH)	DCR (mΩ)	Isat (A)
	1MHz, 1V	Max.	Typ.
PWD0504-561M0T	560	3120	0.22
PWD0504-681M0T	680	3900	0.20
PWD0504-821M0T	820	5200	0.19

Testing Conditions:

1.All test data is base on 25 °C ambient .
Inductance measuring frequency: L≤10uH at 100KHz/0.25V, L＞10uH at 1KHz/0.25V.
2.Operating temperature range - 40 °C to + 105 °C
3.Isat(A): DC current will cause L0 to drop approximately 20 %
4.The part temperature (ambient + temp rise) should not exceed 105 °C under worst cases.
5.Storage Temperature: Under 25℃,Humidity < 65% RH.If product is preserved for more than 12 months, the solderability of their ter-minals may be deteriorated.

Reel & QTY information

Series	MPQ(Pcs)	Reel (mm)	W / P (mm)
PWD0503	2,000	13″	16 / 8
PWD0504	1,500	13″	16 / 8