

PWR Series Power Inductor

Features

- Small size and low profile.
- Closed magnetic circuit design by glue.
- Competitive cost solution

Applications

- DC/DC buck, Boost application.
- Consumer device and etc

P/N Information

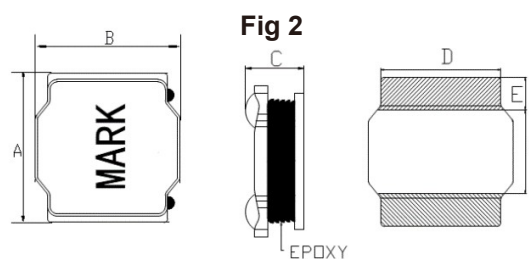
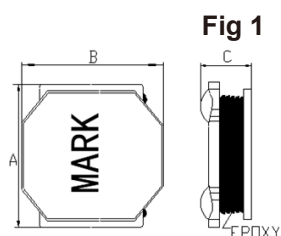
① ② ③ ④ ⑤ ⑥ ⑦
 • PW R 5020 -150 M 0 T

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



④ Nominal Inductance[μH]	
Example	Nominal Value[μH]
R15	0.15μH
1R0	1.0μH
100M	10μH
⑤ Inductance Tolerance	
M	±20%
N	±30%

Shape & Dimension information



Series	Fig	Dimensions					
		A	B	C	D Typ.	E Typ.	F Typ.
PWR3010	1	3.0±0.2	3.0±0.2	1.2 max	2.5	0.9	1.2
PWR3012	1	3.0±0.2	3.0±0.2	1.3 max	2.85	0.9	1.2
PWR3015	1	3.0±0.2	3.0±0.2	1.5 max	2.75	0.9	1.2
PWR4018	1	4.0±0.2	4.0±0.2	1.8 max	3.4	1.4	1.3
PWR4030	1	4.0±0.2	4.0±0.2	3.0 max	3.4	1.35	1.3
PWR5020	2	5.0±0.2	5.0±0.2	2.0 max	4.0	1.35	2.3
PWR5040	1	5.0±0.2	5.0±0.2	4.1 max	4.0	1.5	2.0
PWR6028	2	6.0±0.2	6.0±0.2	3.0 max	5.0	1.85	2.3
PWR6045	2	6.0±0.2	6.0±0.2	4.5 max	4.9	1.65	2.7
PWR8040	2	8.0±0.3	8.0±0.3	4.2 max	6.3	2.45	3.1

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Specification information

Yint P/N	Inductance	DC Resistance	Saturation Current	Heating Rating Current
	L0 (μH)	DCR (mΩ)	Isat (A)	Irms (A) $\Delta T \leq 40^{\circ}\text{C}$
	100kHz, 0.25V	Max.	Typ.	Typ.
PWR3010-1R0M0T	1.0	80	2.30	2.10
PWR3010-1R5M0T	1.5	100	2.10	2.00
PWR3010-2R2M0T	2.2	140	1.60	1.50
PWR3010-3R3M0T	3.3	189	1.30	1.20
PWR3010-4R7M0T	4.7	280	1.10	1.00
PWR3010-6R8M0T	6.8	380	0.95	0.90
PWR3010-100M0T	10	520	0.75	0.70
PWR3010-150M0T	15	850	0.60	0.50
PWR3010-220M0T	22	1300	0.50	0.45
PWR3010-330M0T	33	2050	0.40	0.35
PWR3010-470M0T	47	2500	0.35	0.30
PWR3012-R22N0T	0.22	30	5.30	3.50
PWR3012-R82N0T	0.82	46	2.30	2.20
PWR3012-1R0M0T	1.0	60	2.00	1.95
PWR3012-1R2M0T	1.2	72	1.80	1.75
PWR3012-1R5M0T	1.5	72	1.60	1.55
PWR3012-1R8M0T	1.8	95	1.50	1.45
PWR3012-2R2M0T	2.2	105	1.40	1.35
PWR3012-2R4M0T	2.4	110	1.30	1.25
PWR3012-2R7M0T	2.7	110	1.14	1.10
PWR3012-3R3M0T	3.3	130	1.05	1.00
PWR3012-3R6M0T	3.6	156	1.05	1.00
PWR3012-3R9M0T	3.9	156	1.00	0.95
PWR3012-4R7M0T	4.7	156	0.90	0.85
PWR3012-5R6M0T	5.6	226	0.80	0.75
PWR3012-6R8M0T	6.8	247	0.75	0.70
PWR3012-100M0T	10	345	0.60	0.55
PWR3012-120M0T	12	480	0.50	0.45
PWR3012-150M0T	15	492	0.45	0.43
PWR3012-180M0T	18	709	0.43	0.42
PWR3012-220M0T	22	839	0.42	0.40
PWR3012-270M0T	27	1100	0.35	0.34
PWR3012-330M0T	33	1130	0.34	0.32

PWR Series Power Inductor

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	L0 (μH)	DCR (mΩ)	Isat (A)	Irms (A) $\Delta T \leq 40^{\circ}\text{C}$
	100kHz, 0.25V	Max.	Typ.	Typ.
PWR3012-360M0T	36	1200	0.33	0.30
PWR3012-390M0T	39	1700	0.30	0.28
PWR3012-470M0T	47	1800	0.27	0.26
PWR3012-560M0T	56	1900	0.26	0.25
PWR3012-680M0T	68	2150	0.24	0.22
PWR3012-820M0T	82	3200	0.21	0.20
PWR3012-101M0T	100	3600	0.20	0.18
PWR3015-1R0M0T	1.0	48	2.80	2.50
PWR3015-1R5M0T	1.5	65	2.10	2.00
PWR3015-2R2M0T	2.2	78	1.60	1.50
PWR3015-3R3M0T	3.3	104	1.30	1.20
PWR3015-4R7M0T	4.7	160	1.20	1.10
PWR3015-6R8M0T	6.8	234	0.85	0.80
PWR3015-100M0T	10	330	0.70	0.60
PWR3015-150M0T	15	430	0.60	0.50
PWR3015-220M0T	22	580	0.55	0.50
PWR3015-330M0T	33	1050	0.44	0.40
PWR3015-470M0T	47	1500	0.35	0.30
PWR3015-680M0T	68	2400	0.26	0.25
PWR3015-101M0T	100	3900	0.20	0.18
PWR4018-R56N0T	0.56	24	5.00	4.80
PWR4018-1R0M0T	1.0	32	4.50	3.50
PWR4018-1R2M0T	1.2	45	4.00	3.00
PWR4018-2R2M0T	2.2	58	3.00	2.60
PWR4018-3R3M0T	3.3	84	2.15	2.00
PWR4018-4R7M0T	4.7	115	2.00	1.80
PWR4018-5R6M0T	5.6	125	1.70	1.65
PWR4018-6R8M0T	6.8	135	1.60	1.50
PWR4018-100M0T	10	220	1.40	1.30
PWR4018-150M0T	15	325	0.95	0.90
PWR4018-220M0T	22	450	0.80	0.75
PWR4018-330M0T	33	680	0.75	0.70
PWR4018-470M0T	47	845	0.65	0.55
PWR4018-680M0T	68	1300	0.52	0.50
PWR4018-101M0T	100	1900	0.42	0.40

PWR Series Power Inductor

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	L0 (μH)	DCR (mΩ)	Isat (A)	Irms (A) $\Delta T \leq 40^{\circ}\text{C}$
	100kHz, 0.25V	Max.	Typ.	Typ.
PWR4018-151M0T	150	3000	0.36	0.34
PWR4018-221M0T	220	4800	0.30	0.25
PWR4030-1R0N0T	1.0	28	5.50	4.50
PWR4030-1R5M0T	1.5	41	5.00	3.50
PWR4030-2R2M0T	2.2	46	4.80	3.00
PWR4030-3R3M0T	3.3	65	4.00	2.40
PWR4030-4R7M0T	4.7	78	3.40	2.30
PWR4030-6R8M0T	6.8	125	2.50	2.00
PWR4030-100M0T	10	155	2.20	1.70
PWR4030-150M0T	15	260	1.80	1.20
PWR4030-220M0T	22	292	1.60	1.10
PWR4030-330M0T	33	465	1.20	0.95
PWR4030-470M0T	47	598	1.10	0.80
PWR4030-560M0T	56	694	0.88	0.75
PWR4030-680M0T	68	1087	0.77	0.60
PWR4030-101M0T	100	1440	0.70	0.55
PWR4030-151M0T	150	1820	0.50	0.45
PWR4030-221M0T	220	4500	0.40	0.30
PWR5020-1R0N0T	1.0	26	4.40	4.20
PWR5020-1R5N0T	1.5	34	4.20	4.10
PWR5020-2R2N0T	2.2	49	3.80	3.20
PWR5020-3R3M0T	3.3	58	3.20	3.10
PWR5020-4R7M0T	4.7	78	2.50	2.40
PWR5020-6R8M0T	6.8	106	2.20	2.10
PWR5020-100M0T	10	150	1.50	1.40
PWR5020-150M0T	15	220	1.40	1.30
PWR5020-220M0T	22	294	1.15	1.10
PWR5020-270M0T	27	390	1.10	1.00
PWR5020-330M0T	33	462	1.00	0.60
PWR5020-470M0T	47	630	0.85	0.80
PWR5020-680M0T	68	800	0.60	0.55
PWR5020-101M0T	100	1320	0.55	0.50
PWR5020-221M0T	220	2860	0.35	0.30
PWR5020-102M0T	1000	18000	0.15	0.14
PWR5040-1R0N0T	1.0	18	7.50	6.00
PWR5040-1R5N0T	1.5	25	5.50	5.40
PWR5040-2R2M0T	2.2	26	4.90	4.80

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	L0 (μH)	DCR (mΩ)	Isat (A)	Irms (A) $\Delta T \leq 40^{\circ}\text{C}$
	100kHz, 0.25V	Max.	Typ.	Typ.
PWR5040-3R3M0T	3.3	33	4.00	3.60
PWR5040-4R7M0T	4.7	42	3.50	3.40
PWR5040-6R8M0T	6.8	56	2.90	2.80
PWR5040-100M0T	10	78	2.30	2.20
PWR5040-150M0T	15	104	2.00	1.90
PWR5040-220M0T	22	166	1.60	1.50
PWR5040-270M0T	27	200	1.40	1.30
PWR5040-330M0T	33	228	1.30	1.20
PWR5040-470M0T	47	370	1.10	1.00
PWR5040-560M0T	56	410	1.00	0.95
PWR5040-680M0T	68	600	0.85	0.80
PWR5040-101M0T	100	700	0.70	0.60
PWR5040-221M0T	220	2250	0.40	0.35
PWR6028-1R0N0T	1.0	20	8.00	5.50
PWR6028-1R5N0T	1.5	25	7.00	5.20
PWR6028-2R2M0T	2.2	28	6.00	4.50
PWR6028-3R3M0T	3.3	40	4.50	3.50
PWR6028-4R7M0T	4.7	45	4.00	3.00
PWR6028-5R6M0T	5.6	60	3.50	2.50
PWR6028-6R8M0T	6.8	65	3.20	2.40
PWR6028-100M0T	10	85	2.50	2.00
PWR6028-120M0T	12	96	2.40	1.90
PWR6028-150M0T	15	125	2.30	1.80
PWR6028-220M0T	22	185	1.90	1.40
PWR6028-270M0T	27	210	1.60	1.30
PWR6028-330M0T	33	260	1.40	1.20
PWR6028-470M0T	47	410	1.30	1.00
PWR6028-560M0T	56	420	1.10	0.90
PWR6028-680M0T	68	500	1.00	0.85
PWR6028-820M0T	82	680	0.90	0.80
PWR6028-101M0T	100	750	0.85	0.75
PWR6028-151M0T	150	860	0.65	0.60
PWR6028-221M0T	220	1600	0.55	0.50
PWR6028-331M0T	330	2400	0.50	0.45
PWR6028-471M0T	470	3200	0.35	0.32

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	L0 (μH)	DCR (mΩ)	Isat (A)	Irms (A) $\Delta T \leq 40^{\circ}\text{C}$
	100kHz, 0.25V	Max.	Typ.	Typ.
PWR6028-681M0T	680	5500	0.32	0.30
PWR6028-821M0T	820	5800	0.26	0.25
PWR6028-102M0T	1000	7800	0.23	0.22
PWR6045-1R0M0T	1.0	14	9.85	7.00
PWR6045-1R5M0T	1.5	16	9.00	6.00
PWR6045-1R8M0T	1.8	16	7.00	5.50
PWR6045-2R2M0T	2.2	23	6.90	5.40
PWR6045-3R3M0T	3.3	27	5.90	4.50
PWR6045-4R7M0T	4.7	35	5.30	4.20
PWR6045-5R6M0T	5.6	36	4.30	4.10
PWR6045-6R8M0T	6.8	40	4.20	4.00
PWR6045-8R2M0T	8.2	60	3.50	3.20
PWR6045-100M0T	10	66	3.30	3.10
PWR6045-120M0T	12	78	3.00	2.80
PWR6045-150M0T	15	88	2.70	2.60
PWR6045-220M0T	22	138	2.20	2.10
PWR6045-270M0T	27	156	2.10	1.90
PWR6045-330M0T	33	182	1.70	1.50
PWR6045-470M0T	47	260	1.65	1.40
PWR6045-680M0T	68	380	1.40	1.10
PWR6045-101M0T	100	550	1.00	0.95
PWR6045-121M0T	120	605	0.95	0.90
PWR6045-151M0T	150	750	0.80	0.75
PWR6045-221M0T	220	1040	0.75	0.70
PWR6045-331M0T	330	2200	0.55	0.45
PWR6045-471M0T	470	2650	0.50	0.40
PWR6045-681M0T	680	3800	0.40	0.35
PWR6045-102M0T	1000	6500	0.32	0.30
PWR8040-1R0N0T	1.0	9	12.00	8.50
PWR8040-1R5N0T	1.5	12	9.50	7.50
PWR8040-2R2M0T	2.2	14	9.00	7.00
PWR8040-3R3M0T	3.3	20	8.00	6.00
PWR8040-4R7M0T	4.7	22	6.20	5.00
PWR8040-6R8M0T	6.8	30	5.00	4.50
PWR8040-100M0T	10	50	4.50	3.50

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	L0 (μH)	DCR (mΩ)	Isat (A)	Irms (A) $\Delta T \leq 40^{\circ}\text{C}$
	100kHz, 0.25V	Max.	Typ.	Typ.
PWR8040-150M0T	15	60	3.20	3.00
PWR8040-220M0T	22	84	2.80	2.60
PWR8040-330M0T	33	135	2.20	2.00
PWR8040-470M0T	47	180	2.00	1.90
PWR8040-680M0T	68	254	1.60	1.50
PWR8040-101M0T	100	360	1.25	1.20
PWR8040-121M0T	120	400	1.12	0.95
PWR8040-151M0T	150	600	1.00	0.85
PWR8040-221M0T	220	780	0.90	0.80
PWR8040-331M0T	330	1150	0.70	0.65
PWR8040-471M0T	470	1900	0.65	0.60
PWR8040-681M0T	680	2650	0.55	0.50
PWR8040-102M0T	1000	3600	0.40	0.35

Testing Conditions:

- 1.All test data is base on 25 °C ambient .
- 2.Irms (A):DC current will cause an approximate ΔT of 40 °C base on 25 °C ambient temperature
- 3.Isat(A): DC current will cause L0 to drop approximately 30 %
- 4.The part temperature (ambient + temp rise) should not exceed 115 °C under worst cases.

Reel & QTY information

Series	MPQ(Pcs)
PWR3010	2,000
PWR3012	2,000
PWR3015	2,000
PWR4018	3,000
PWR4030	2,000
PWR5020	2,500
PWR5040	1,500
PWR6028	2,000
PWR6045	1,500
PWR8040	1,000