

PWR 30XX Series Power Inductor

Features

- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels.
- Metallization on ferrite core results in excellent shock resistance and damage-free durability.
- Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
- 30% higher current rating than conventional inductors of equal size.
- Takes up less PCB real estate and save more power.



Applications

- LED Lighting.
- Flat-screen TVs, blue-ray disc recorders, set top box, movie cameras, smart phone.
- Notebooks, desktop computers, servers, graphic cards cards.
- Portable gaming devices, personal navigation systems, personal multimedia devices.
- Telecomm base stations.
- VR, AR

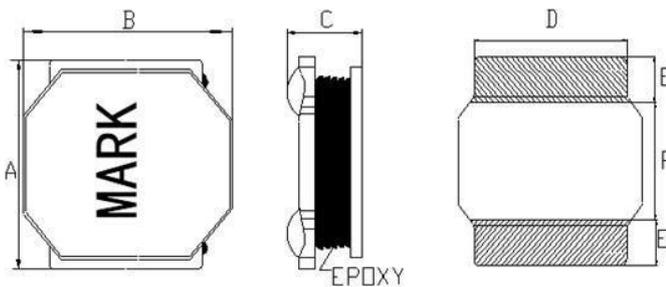
P/N Information

① ② ③ ④ ⑤ ⑥ ⑦
 • PW R 3010- 100 M 0 T

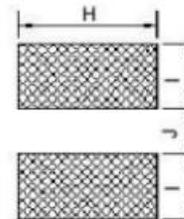
- ① Product series
- ② Material
- ③ Size
- ④ Inductance
- ⑤ Tolerance
- ⑥ Internal code
- ⑦ Taping information

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

Shape & Dimension information



Recommended Pattern



Unit : mm

Series	Dimensions								
	A	B	C	D	E	F	H	I	J
PWR3010	3.0±0.2	3.0±0.2	1.2 max	2.5	0.9	1.2	2.7 typ	1.0 typ	1.0 typ
PWR3012	3.0±0.2	3.0±0.2	1.3 max	2.85	0.9	1.2	3.0 typ	1.0 typ	1.0 typ
PWR3015	3.0±0.2	3.0±0.2	1.5 max	2.75	0.9	1.2	2.9 typ	1.0 typ	1.0 typ

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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) ΔT≤40°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

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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.
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

Testing Conditions:

1. All test data is base on 25 °C ambient .
2. Isat(A): DC current will cause L0 to drop approximately 30 %.
3. Operating temperature range (individual chip without packing): -40°C ~ +125°C (Including Self-heating) .
4. Storage temperature range (packaging conditions): -10°C ~ +40°C and RH 70% (Max.).

Reel & QTY information

Series	MPQ(Pcs)	Reel (W / P)
PWR3010	2,000	7" (8/4)
PWR3012	2,000	7" (8/4)
PWR3015	2,000	7" (8/4)