

## PWH Series Metal Material Power Inductor

### Features

- Metal material for large current and low DCR of super performance.
- Small size and low profile.
- Closed magnetic circuit design by glue.



### Applications

- Smart phone
- Blue -ray disc recorders, set top box
- Notebooks, desktop computers, servers
- Portable gaming devices, personal navigation systems, personal multimedia devices

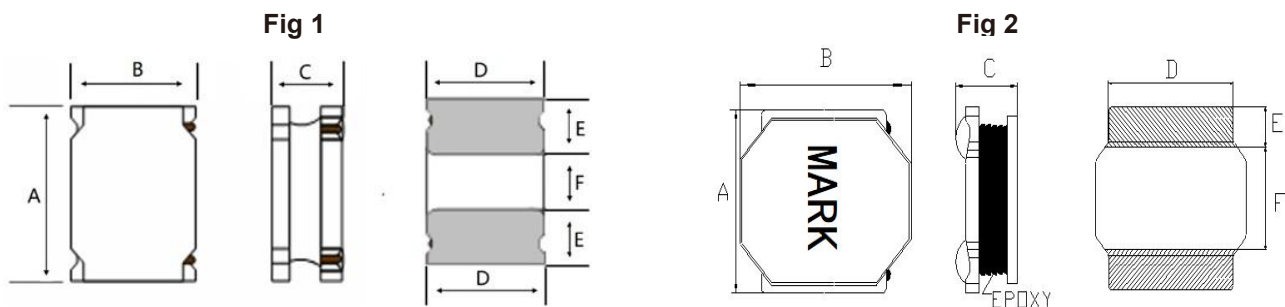
### P/N Information

① PW ② H ③ 2110 ④ -2R2 ⑤ M ⑥ 0 ⑦ T

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

④ Nominal Inductance[ $\mu$ H]	
Example	Nominal Value[ $\mu$ H]
R15	0.15 $\mu$ H
1R0	1.0 $\mu$ H
100	10 $\mu$ H
⑤ Inductance Tolerance	
M	$\pm 20\%$
N	$\pm 30\%$

### Shape & Dimension information



Unit : mm

Series	Fig	Dimensions					
		A	B	C	D Typ.	E Typ.	F Typ.
PWH2110	1	2.0 $\pm$ 0.2	1.7 $\pm$ 0.2	1.05 max	1.50	0.6	0.8
PWH2H10	1	2.5 $\pm$ 0.2	2.2 $\pm$ 0.2	1.05 max	1.65	0.8	0.9
PWH2H12	1	2.5 $\pm$ 0.2	2.2 $\pm$ 0.2	1.25 max	1.65	0.8	0.9
PWH3012	2	3.0 $\pm$ 0.2	3.0 $\pm$ 0.2	1.35 max	2.55	1.1	0.8
PWH4012	2	4.0 $\pm$ 0.2	4.0 $\pm$ 0.2	1.35 max	3.50	1.3	1.4
PWH4020	2	4.0 $\pm$ 0.2	4.0 $\pm$ 0.2	2.0max	3.50	1.0	2.0

## PWH Series Metal Material Power Inductor

## Specification

Yint P/N	Inductance	DC Resistance	Saturation Current	Heating Rating Current
	L0 (μH)	DCR (mΩ)	Isat (A)*	Irms (A) ΔT≤40°C
	1MHz, 1V	Max.	Typ.	Typ.
PWH2110-R24N0T	0.24	40	4.5	3.15
PWH2110-R33N0T	0.33	50	4.2	3.1
PWH2110-R47N0T	0.47	55	4.0	3.0
PWH2110-R68N0T	0.68	65	3.5	2.8
PWH2110-1R0M0T	1.0	96	3.35	2.2
PWH2110-1R5M0T	1.5	130	1.95	1.8
PWH2110-2R2M0T	2.2	195	1.9	1.5
PWH2110-3R3M0T	3.3	310	1.4	1.2
PWH2110-4R7M0T	4.7	440	1.2	1.00
PWH2110-6R8M0T	6.8	540	0.9	0.85
PWH2110-100M0T	10	826	0.8	0.7
-	-	-	-	-
PWH2H10-R24N0T	0.24	26	5.0	4.4
PWH2H10-R33N0T	0.33	35	4.8	4
PWH2H10-R47N0T	0.47	45	4.4	3.4
PWH2H10-R56N0T	0.56	48	3.8	3.1
PWH2H10-R68N0T	0.68	59	3.2	3
PWH2H10-1R0M0T	1.0	76	3.1	2.6
PWH2H10-1R5M0T	1.5	106	2.6	2.0
PWH2H10-2R2M0T	2.2	155	1.9	1.8
PWH2H10-3R3M0T	3.3	235	1.6	1.5
PWH2H10-4R7M0T	4.7	276	1.3	1.2
PWH2H10-6R8M0T	6.8	430	1.1	1.0
PWH2H10-100M0T	10	520	0.9	0.85
-	-	-	-	-
PWH2H12-R24N0T	0.24	30	6.5	4.5
PWH2H12-R33N0T	0.33	36	5.3	3.2
PWH2H12-R47N0T	0.47	40	4.9	3.1
PWH2H12-R68N0T	0.68	50	3.85	3
PWH2H12-1R0M0T	1.0	60	3.8	2.9
PWH2H12-1R5M0T	1.5	86	2.9	2.1
PWH2H12-2R2M0T	2.2	115	2.6	2
PWH2H12-3R3M0T	3.3	190	1.9	1.7
PWH2H12-4R7M0T	4.7	235	1.8	1.5
PWH2H12-6R8M0T	6.8	380	1.15	1.1
PWH2H12-100M0T	10	480	1.1	1.0
PWH2H12-220M0T	22	1080	0.7	0.65
-	-	-	-	-
PWH3012-R33N1T	0.33	27	7.2	4.1
PWH3012-R47N1T	0.47	33	6.1	4.0
PWH3012-R68N1T	0.68	40	5.8	3.8
PWH3012-1R0M1T	1.0	54	4.0	2.8
PWH3012-1R5M1T	1.5	74	3.2	2.0
PWH3012-2R2M1T	2.2	108	2.2	1.9
PWH3012-3R3M1T	3.3	150	1.7	1.6
PWH3012-4R7M1T	4.7	230	1.5	1.4

## PWH Series Metal Material Power Inductor

**Specification**

Yint P/N	Inductance	DC Resistance	Saturation Current	Heating Rating Current
	L0 (μH)	DCR (mΩ)	Isat (A)	Irms (A) ΔT≤40°C
	1MHz, 1V	Max.	Typ.	Typ.
PWH3012-6R8M1T	6.8	340	1.4	1.1
PWH3012-100M1T	10	460	1.0	0.9
-	-	-	-	-
PWH4012-R33N1T	0.33	32	8.0	4.5
PWH4012-R47N1T	0.47	40	7.5	4.2
PWH4012-R68N1T	0.68	40	5.0	4.1
PWH4012-1R0M1T	1.0	58	4.5	3.5
PWH4012-1R2M1T	1.2	64	4.0	3.2
PWH4012-1R5M1T	1.5	70	3.9	2.6
PWH4012-2R2M1T	2.2	79	2.8	2.5
PWH4012-3R3M1T	3.3	125	2.0	1.9
PWH4012-4R7M1T	4.7	166	1.8	1.7
PWH4012-6R8M1T	6.8	226	1.6	1.5
PWH4012-100M1T	10	335	1.5	1.3
PWH4012-220M1T	22	679	0.9	0.9
-	-	-	-	-
PWH4020-R47N1T	0.47	22	10	7.0
PWH4020-1R0M1T	1.0	26	8.5	5.1
PWH4020-1R5M1T	1.5	36	7.2	4.5
PWH4020-2R2M1T	2.2	48	6.1	4.2
PWH4020-3R3M1T	3.3	72	4.2	3.5
PWH4020-4R7M1T	4.7	108	4.0	2.5
PWH4020-6R8M1T	6.8	156	3.0	2.1
PWH4020-100M1T	10	216	2.8	1.7

**Testing Conditions:**

- 1.All test data is base on 25 °C ambient .
- 2.Operating temperature range - 40 °C to + 125 °C
- 3.Irms (A):DC current will cause an approximate ΔT of 40 °C base on 25 °C ambient temperature
- 4.Isat(A): DC current will cause L0 to drop approximately 30 %
- 5.The part temperature (ambient + temp rise) should not exceed 125 °C under worst cases.

**Reel & QTY information**

Series	MPQ(Pcs)	Reel (W/P)
PWH2110	2,000	7" 8 / 4
PWH2H10	2,000	7" 8 / 4
PWH2H12	2,000	7" 8 / 4
PWH3012	2,000	7" 8 / 4
PWH4012	4,500	13" 12 / 8
PWH4020	3,000	13" 12 / 8