APW Series

Features

- Ideal for a variety of DC-DC converter Inductors Applications. Available on tape and reel for automatic insertion. Low DC resistance and large permissible DC current. This can be surface mount assembly and reflow soldering is also possible.

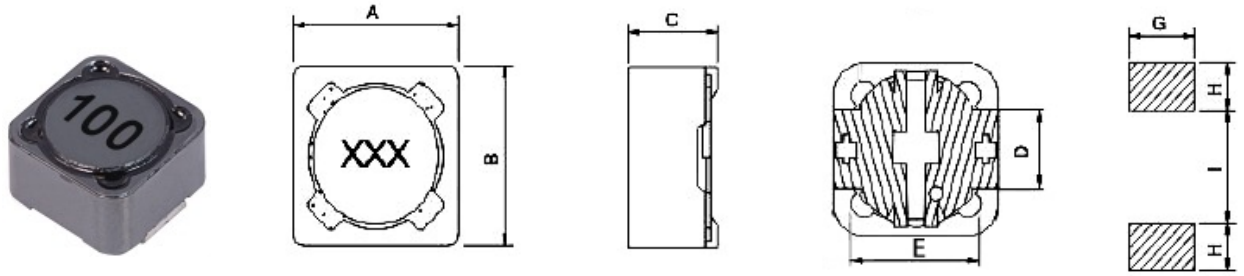
Applications

- Excellent for power line DC-DC conversion application used in hard disk, notebook computers and other electronic equipment.

Test Equipment and Conditions

- Inductance is measured with HP-4284A LCR meter or equivalent.
- Maximum allowable DC current which causes 35% inductance reduction of the initial value ,or coil
- Temperature to rise by 40℃,whichever is smaller.(Reference ambient temperature 25℃) .
- Operating temperature：-40℃～+125℃.

External Dimensions (Unit : m/m)



TYPE	A	B	C	D	E	G	H	I	Q'TY/Reel
APW07A30	7.6Max	7.6Max	3.55Max	2.0	6.0	3.25	2.5	3.5	1000
APW07A45	7.6Max	7.6Max	4.5Max	2.0	6.0	3.25	2.5	3.5	1000
APW12A45	12.5Max	12.5Max	4.5Max	4.9	10.0	5.5	3.85	6.1	500
APW12A60	12.5Max	12.5Max	6.0Max	4.9	10.0	5.5	3.85	6.1	500
APW12A80	12.5Max	12.5Max	8.0Max	4.9	10.0	5.5	3.85	6.1	500
APW12A10	12.5Max	12.5Max	10.0Max	4.9	10.0	5.5	3.85	6.1	300

Part Number Code

APW	07	A	30	N	R33
A	B	C	D	E	F

A:	Type of product	Power Inductor
B:	Dimensions(mm)	07：7.6 x7.6　12：12.5x12.5
C:	Materials	NO use
D:	Thickness(mm)	30：3.55　45：4.5
E:	Tolerance	K：±10%　M：±20%　N：±30%
F:	Inductance	R33=0.33uH

APW Series

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (mΩ)Typ.	DC Resistance (mΩ)Max.	Heat Rating Current Irms (A)	Saturation Current Isat (A)
APW07A30□-R33	0.33	100	6.93	8.36	6.52	15.12
APW07A30□-1R0	1.0	100	9.69	11.59	5.54	8.36
APW07A30□-1R5	1.5	100	12.35	14.82	4.90	6.84
APW07A30□-2R2	2.2	100	15.67	18.81	4.35	5.79
APW07A30□-3R3	3.3	100	24.60	29.45	3.47	4.43
APW07A30□-4R7	4.7	100	28.21	33.82	3.24	3.96
APW07A30□-6R8	6.8	100	41.32	49.68	2.67	3.27
APW07A30□-8R2	8.2	100	56.24	67.54	2.29	2.79
APW07A30□-100	10.0	100	62.32	74.76	2.18	2.59
APW07A30□-150	15.0	100	80.18	95.95	1.92	2.15
APW07A30□-220	22.0	100	101.65	122.55	1.70	1.75
APW07A30□-330	33.0	100	157.70	189.05	1.37	1.41
APW07A30□-470	47.0	100	228.95	274.55	1.13	1.19
APW07A30□-680	68.0	100	340.10	408.50	0.93	1.00
APW07A30□-820	82.0	100	364.80	437.00	0.90	0.93
APW07A30□-101	100.0	100	500.65	600.40	0.76	0.82
APW07A30□-151	150.0	100	808.45	969.00	0.60	0.68
APW07A30□-221	220.0	100	997.50	1197.00	0.54	0.55
APW07A30□-331	330.0	100	1510.50	1814.50	0.44	0.46
APW07A30□-471	470.0	100	2242.00	2698.00	0.36	0.38
APW07A30□-681	680.0	100	3296.50	3961.50	0.30	0.32
APW07A30□-821	820.0	100	3733.50	4474.50	0.28	0.29
APW07A30□-102	1000.0	100	4123.00	4940.00	0.27	0.26
APW07A45□-R33	0.33	100	7.03	8.36	6.57	19.32
APW07A45□-1R0	1.0	100	9.40	11.30	5.65	10.71
APW07A45□-1R5	1.5	100	11.21	13.49	5.18	8.76
APW07A45□-2R2	2.2	100	11.97	14.44	4.99	7.41
APW07A45□-3R3	3.3	100	17.38	20.90	4.13	5.67
APW07A45□-4R7	4.7	100	24.13	28.97	3.50	4.58
APW07A45□-6R8	6.8	100	39.71	47.69	2.73	3.85
APW07A45□-8R2	8.2	100	41.89	50.35	2.65	3.57
APW07A45□-100	10.0	100	46.45	55.67	2.53	3.32
APW07A45□-150	15.0	100	60.51	72.67	2.21	2.60
APW07A45□-220	22.0	100	87.87	105.45	1.83	2.23
APW07A45□-330	33.0	100	135.85	163.40	1.48	1.81
APW07A45□-470	47.0	100	205.20	246.05	1.20	1.48
APW07A45□-680	68.0	100	251.75	302.10	1.08	1.24
APW07A45□-820	82.0	100	327.75	393.30	0.95	1.16
APW07A45□-101	100.0	100	363.85	437.00	0.90	1.03
APW07A45□-151	150.0	100	561.45	674.50	0.72	0.85
APW07A45□-221	220.0	100	861.65	1035.50	0.58	0.69
APW07A45□-331	330.0	100	1339.50	1615.00	0.47	0.56

APW Series

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (mΩ)Typ.	DC Resistance (mΩ)Max.	Heat Rating Current Irms (A)	Saturation Current Isat (A)
APW07A45□-471	470.0	100	1653.00	1985.50	0.42	0.48
APW07A45□-681	680.0	100	2451.00	2945.0	0.34	0.39
APW07A45□-821	820.0	100	2783.50	3334.50	0.32	0.36
APW07A45□-102	1000.0	100	3695.50	4436.50	0.28	0.32
APW12A45□-R47	0.47	100	2.09	2.56	16.80	25.62
APW12A45□-1R0	1.0	100	2.85	3.42	14.59	18.90
APW12A45□-1R5	1.5	100	4.51	5.41	11.65	14.70
APW12A45□-2R2	2.2	100	5.62	6.74	9.55	12.02
APW12A45□-3R9	3.9	100	11.87	14.25	7.35	8.82
APW12A45□-4R7	4.7	100	12.82	15.39	6.82	8.03
APW12A45□-6R8	6.8	100	17.15	20.61	5.88	6.79
APW12A45□-8R2	8.2	100	20.58	24.70	5.46	6.53
APW12A45□-100	10.0	100	22.16	26.60	4.72	6.09
APW12A45□-120	12.0	100	30.08	36.10	4.30	5.20
APW12A45□-150	15.0	100	35.43	42.56	3.78	4.85
APW12A45□-180	18.0	100	44.62	53.58	3.57	4.53
APW12A45□-220	22.0	100	51.29	61.56	3.36	4.02
APW12A45□-270	27.0	100	63.33	76.00	2.94	3.61
APW12A45□-330	33.0	100	76.78	92.15	2.73	3.27
APW12A45□-390	39.0	100	104.5	125.40	2.41	2.99
APW12A45□-470	47.0	100	118.42	142.12	2.31	2.76
APW12A45□-560	56.0	100	137.10	164.54	2.10	2.46
APW12A45□-680	68.0	100	174.16	209.00	1.89	2.23
APW12A45□-820	82.0	100	202.08	242.53	1.78	2.03
APW12A45□-101	100.0	100	243.83	292.60	1.57	1.87
APW12A45□-121	120.0	100	295.62	354.73	1.36	1.73
APW12A45□-151	150.0	100	352.46	422.94	1.36	1.51
APW12A45□-181	180.0	100	476.57	571.90	1.15	1.36
APW12A45□-221	220.0	100	530.10	636.12	1.05	1.20
APW12A45□-271	270.0	100	688.75	826.50	0.92	1.14
APW12A45□-331	330.0	100	783.75	940.50	0.87	0.96
APW12A45□-471	470.0	100	1180.37	1416.45	0.71	0.77
APW12A45□-681	680.0	100	1753.53	2104.25	0.58	0.68
APW12A45□-821	820.0	100	2003.71	2404.45	0.55	0.65
APW12A45□-102	1000.0	100	2753.10	3303.15	0.46	0.55
APW12A60□-R47	0.47	100	1.71	1.99	18.48	34.65
APW12A60□-1R0	1.0	100	2.28	2.75	15.75	24.78
APW12A60□-1R5	1.5	100	2.75	3.23	14.49	19.21
APW12A60□-2R2	2.2	100	4.27	5.13	11.44	15.75
APW12A60□-3R3	3.3	100	5.98	7.22	9.72	13.33
APW12A60□-4R7	4.7	100	9.97	11.97	7.53	10.19
APW12A60□-6R8	6.8	100	11.68	14.06	6.97	9.11

APW Series

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (mΩ)Typ.	DC Resistance (mΩ)Max.	Heat Rating Current Irms (A)	Saturation Current Isat (A)
APW12A60□-8R2	8.2	100	16.72	20.04	5.81	8.25
APW12A60□-100	10.0	100	17.95	21.56	5.61	7.52
APW12A60□-150	15.0	100	28.31	33.91	4.48	5.97
APW12A60□-180	18.0	100	35.81	42.46	4.00	5.58
APW12A60□-220	22.0	100	37.62	45.22	3.88	4.94
APW12A60□-330	33.0	100	47.97	57.57	3.44	4.03
APW12A60□-470	47.0	100	70.30	84.36	2.84	3.40
APW12A60□-560	56.0	100	96.90	115.90	2.42	3.15
APW12A60□-680	68.0	100	95.95	125.40	2.33	2.83
APW12A60□-820	82.0	100	121.60	146.30	2.15	2.50
APW12A60□-101	100.0	100	161.50	193.80	1.86	2.31
APW12A60□-151	150.0	100	235.60	282.15	1.55	1.90
APW12A60□-221	220.0	100	364.80	437.00	1.24	1.58
APW12A60□-331	330.0	100	457.90	550.05	1.11	1.28
APW12A60□-471	470.0	100	682.10	817.95	0.91	1.07
APW12A60□-681	680.0	100	1045.00	1263.50	0.73	0.89
APW12A60□-821	820.0	100	1415.50	1700.50	0.63	0.80
APW12A60□-102	1000.0	100	1605.50	1928.50	0.59	0.73
APW12A60□-472	4700.0	100	7153.50	8597.50	0.28	0.33
APW12A60□-124	120000.0	100	142500.00	171000.00	0.06	0.07
APW12A80□-R47	0.47	100	1.85	2.22	18.79	58.80
APW12A80□-1R0	1.0	100	2.47	2.97	16.27	42.00
APW12A80□-1R5	1.5	100	3.23	3.89	14.17	32.65
APW12A80□-2R2	2.2	100	3.81	4.58	13.12	26.77
APW12A80□-3R3	3.3	100	5.38	6.46	11.02	22.57
APW12A80□-4R7	4.7	100	8.71	10.45	8.66	17.32
APW12A80□-6R8	6.8	100	11.02	13.20	7.70	13.96
APW12A80□-8R2	8.2	100	14.91	17.86	6.63	12.81
APW12A80□-100	10.0	100	16.34	19.57	6.34	11.76
APW12A80□-150	15.0	100	23.46	28.21	5.28	10.14
APW12A80□-220	22.0	100	37.14	44.65	4.20	7.94
APW12A80□-330	33.0	100	57.00	68.40	3.39	6.53
APW12A80□-470	47.0	100	68.30	81.89	3.09	5.54
APW12A80□-680	68.0	100	99.75	119.70	2.56	4.66
APW12A80□-820	82.0	100	135.85	163.40	2.19	4.26
APW12A80□-101	100.0	100	154.85	185.25	2.05	3.82
APW12A80□-151	150.0	100	234.65	281.20	1.66	3.16
APW12A80□-221	220.0	100	357.20	428.45	1.35	2.55
APW12A80□-331	330.0	100	545.30	654.55	1.09	2.11
APW12A80□-471	470.0	100	817.95	981.35	0.89	1.76
APW12A80□-681	680.0	100	1026.00	1235.00	0.79	1.45
APW12A80□-821	820.0	100	1396.50	1681.50	0.68	1.33

APW Series

Part Number	Inductance (μH)	Test Frequency (KHz)	DC Resistance (mΩ)Typ.	DC Resistance (mΩ)Max.	Heat Rating Current Irms (A)	Saturation Current Isat (A)
APW12A80□-102	1000.0	100	1577.00	1890.50	0.64	1.19
APW12A10□-150	15.0	100	19.95	24.70	6.82	8.40
APW12A10□-220	22.0	100	21.85	26.60	5.56	6.82
APW12A10□-330	33.0	100	35.15	42.75	4.41	5.77
APW12A10□-470	47.0	100	43.70	57.00	3.99	4.72
APW12A10□-680	68.0	100	65.55	84.55	3.36	3.78
APW12A10□-102	1000.0	100	1140.00	1330.00	0.73	0.94
APW12A10□-152	1500.0	100	1805.00	2090.00	0.52	0.84
APW12A10□-222	2200.0	100	2945.00	3515.00	0.42	0.73