

## Molded SMD Power Inductors APH Series



APH series is designed for low profile type with low RDC and ultra large current. Its molded magnetic shielded type is suitable for high-density mounting and ultra low buzz noise. Soldering conditions can be easily confirmed when mounting onto the board. This series also provides customers with embossed carrier type packaging for automatic mounting machine.

### Features

- RoHS, Halogen Free and REACH Compliance
- High rated current
- Ultra low buzz noise

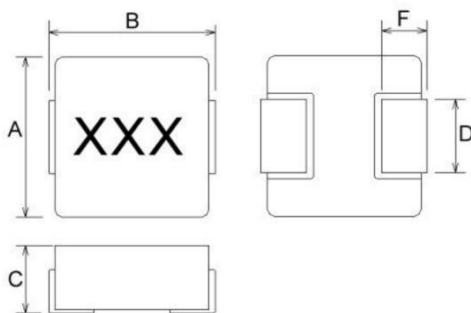
### Applications

- Laptops and PCs
- Switches and servers
- Base stations
- DC/DC converters

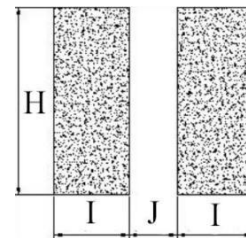
### Part Numbering

A	PH	0630	T	100	M
Grade	Series Name	Dimensions Code (mm)	Configuration	Inductance ( $\mu$ H)	Tolerance
		0420 4.2x4.4x2.0		100 10	$\pm 20\%$
		0530 5.2x5.4x3.0		2R2 2.2	
		0630 6.6x7.1x3.0		4R7 4.7	
		1040 10.5x11.5x4.0			
		1240 12.8x13.5x4.0			
		1250 12.8x13.5x5.0			
		1265 12.8x13.5x6.5			

### Dimensions



### Recommended Land Pattern



## Molded SMD Power Inductors APH Series

Series	A	B	C	D	E	I Typ.	J Typ.	H Typ.
APH0412T	4.2±0.25	4.4±0.35	1.0±0.2	0.8±0.3	2.0±0.3	1.5	2.2	2.5
APH0420T	4.2±0.25	4.4±0.35	1.8±0.2	0.8±0.3	2.0±0.3	1.5	2.2	2.5
APH0518T	5.2±0.2	5.4±0.35	1.6±0.2	1.2±0.2	2.2±0.3	1.9	2.2	2.5
APH0530T	5.2±0.2	5.4±0.35	2.8±0.2	1.2±0.2	2.2±0.3	1.9	2.2	2.5
APH0615T	6.6±0.2	7.0±0.3	1.3±0.2	1.6±0.3	3.0±0.3	2.35	3.7	3.5
APH0618T	6.6±0.2	7.0±0.3	1.6±0.2	1.6±0.3	3.0±0.3	2.35	3.7	3.5
APH0620T	6.6±0.2	7.0±0.3	1.8±0.2	1.6±0.3	3.0±0.3	2.35	3.7	3.5
APH0624T	6.6±0.2	7.0±0.3	2.2±0.2	1.6±0.3	3.0±0.3	2.35	3.7	3.5
APH0630T	6.6±0.2	7.0±0.3	2.8±0.2	1.6±0.3	3.0±0.3	2.35	3.7	3.5
APH0640T	6.6±0.2	7.0±0.3	3.8±0.2	1.6±0.3	3.0±0.3	2.35	3.7	3.5
APH0650T	6.6±0.2	7.0±0.3	4.8±0.2	1.6±0.3	3.0±0.3	2.35	3.7	3.5
APH0840T	8.8±0.4	8.2±0.3	3.8±0.2	1.4±0.3	5.0±0.3	2.75	4	5.5
APH1030T	10.0±0.3	11.5 Max	2.8±0.2	2.0±0.5	3.0±0.3	4.1	5.4	4.1
APH1040T	10.0±0.3	11.0±0.5	3.8±0.2	2.0±0.5	3.0±0.5	4.1	5.4	4.1
APH1050T	10.0±0.3	11.5 Max	4.8±0.2	2.0±0.5	3.0±0.5	4.1	5.4	4.1
APH1240T	12.8±0.5	13.45±0.35	4.0Max.	2.0±0.5	See Remarks	3.25	8	5.5
APH1250T	12.6±0.3	13.45±0.35	4.8±0.2	2.0±0.5	See Remarks	3.25	8	5.5
APH1260T	12.6±0.3	13.45±0.35	5.8±0.2	2.0±0.5	See Remarks	3.25	8	5.5
APH1265T	12.6±0.3	13.45±0.35	6.5Max.	2.0±0.5	5.0±0.3	3.25	8	5.5
APH1770T	17.15Max	17.15±0.35	6.7±0.3	2.5±0.5	12.0±0.3	3.5	11.2	12.8
APH2213T	23.5±0.5	22.0±0.3	12.6±0.4	5.0±0.4	19.0±0.3	5.75	12.5	19.6

## Electrical Characteristics

### APH0412T series

Part Number	Inductance(μH) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(mΩ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0412TR15M	0.15	12.45	15.00	6.91	7.50	9	±20%	R15
APH0412TR22M	0.22	9.13	11.00	6.58	7.00	11	±20%	R22
APH0412TR33M	0.33	6.96	8.40	5.82	6.50	19	±20%	R33
APH0412TR47M	0.47	5.61	6.80	5.32	6.00	21	±20%	R47
APH0412TR68M	0.68	4.98	6.00	4.28	4.70	36	±20%	R68
APH0412T1R0M	1	4.57	5.50	3.91	4.50	47	±20%	1R0
APH0412T1R5M	1.5	3.32	4.00	2.78	3.25	75	±20%	1R5
APH0412T2R2M	2.2	2.49	3.00	2.28	2.75	83.5	±20%	2R2
APH0412T3R3M	3.3	2.43	2.70	1.80	2.00	160	±20%	3R3
APH0412T4R7M	4.7	1.86	2.20	1.50	1.80	195	±20%	4R7

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### APH0420T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0420TR10M	0.1	18.26	22.00	11.47	13.00	4	$\pm$ 20%	R10
APH0420TR22M	0.22	10.38	12.50	8.40	9.50	6.6	$\pm$ 20%	R22
APH0420TR33M	0.33	9.96	12.00	8.81	10.00	11	$\pm$ 20%	R33
APH0420TR47M	0.47	7.89	9.50	6.78	7.50	14	$\pm$ 20%	R47
APH0420TR56M	0.56	7.47	9.00	6.24	7.00	16	$\pm$ 20%	R56
APH0420TR68M	0.68	6.64	8.00	6.28	7.00	18	$\pm$ 20%	R68
APH0420T1R0M	1	5.81	7.00	5.49	6.00	27	$\pm$ 20%	1R0
APH0420T1R2M	1.2	5.40	6.50	5.49	6.00	27	$\pm$ 20%	1R2
APH0420T1R5M	1.5	4.57	5.50	4.41	5.00	46	$\pm$ 20%	1R5
APH0420T2R2M	2.2	4.15	5.00	3.91	4.50	58	$\pm$ 20%	2R2
APH0420T3R3M	3.3	2.91	3.50	2.88	3.30	87	$\pm$ 20%	3R3
APH0420T4R7M	4.7	2.49	3.00	2.29	2.80	105	$\pm$ 20%	4R7
APH0420T6R8M	6.8	2.08	2.50	1.98	2.40	175	$\pm$ 20%	6R8
APH0420T100M	10	1.66	2.00	1.35	1.60	282	$\pm$ 20%	100
APH0420T220M	22	1.16	1.40	0.95	1.20	363	$\pm$ 20%	220

### APH0518T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0518TR47M	0.47	9.96	12.00	9.65	10.50	9	$\pm$ 20%	R47
APH0518TR56M	0.56	9.13	11.00	8.40	9.50	10	$\pm$ 20%	R56
APH0518TR68M	0.68	9.48	10.50	7.85	8.70	13.8	$\pm$ 20%	R68
APH0518T1R0M	1	7.47	9.00	7.32	8.00	17	$\pm$ 20%	1R0
APH0518T1R5M	1.5	6.64	8.00	6.74	7.50	26	$\pm$ 20%	1R5
APH0518T2R2M	2.2	4.98	6.00	4.32	5.00	35	$\pm$ 20%	2R2
APH0518T3R3M	3.3	3.98	4.80	3.91	4.50	58	$\pm$ 20%	3R3
APH0518T4R7M	4.7	3.32	4.00	3.08	3.50	85	$\pm$ 20%	4R7
APH0518T6R8M	6.8	2.82	3.40	2.46	2.80	120	$\pm$ 20%	6R8
APH0518T100M	10	2.08	2.50	2.25	2.50	155	$\pm$ 20%	100

### APH0530T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0530TR10M	0.1	24.90	30.00	23.30	25.00	3	$\pm$ 20%	R10
APH0530TR20M	0.2	16.60	20.00	13.15	14.00	3.9	$\pm$ 20%	R20
APH0530TR33M	0.33	14.94	18.00	13.24	14.00	5.5	$\pm$ 20%	R33
APH0530TR47M	0.47	12.45	15.00	10.15	11.00	8.5	$\pm$ 20%	R47
APH0530TR68M	0.68	9.55	11.50	8.32	9.00	12	$\pm$ 20%	R68
APH0530TR82M	0.82	9.40	10.50	9.23	10.50	10.4	$\pm$ 20%	R82
APH0530T1R0M	1	8.30	10.00	7.91	8.50	14	$\pm$ 20%	1R0
APH0530T1R2M	1.2	7.89	9.50	7.95	8.50	16	$\pm$ 20%	1R2
APH0530T1R5M	1.5	7.47	9.00	7.69	8.20	25	$\pm$ 20%	1R5
APH0530T2R2M	2.2	5.81	7.00	6.49	7.00	29	$\pm$ 20%	2R2
APH0530T3R3M	3.3	4.98	6.00	5.08	5.50	38	$\pm$ 20%	3R3
APH0530T4R7M	4.7	3.82	4.60	4.08	4.50	60	$\pm$ 20%	4R7
APH0530T6R8M	6.8	2.99	3.60	2.99	3.50	90	$\pm$ 20%	6R8
APH0530T100M	10	2.91	3.50	2.86	3.20	125	$\pm$ 20%	100
APH0530T150M	15	2.03	2.20	1.63	1.80	170	$\pm$ 20%	150

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### APH0615T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0615TR47M	0.47	14.44	16.00	9.02	10.00	8.5	$\pm$ 20%	R47
APH0615TR56M	0.56	12.62	14.00	8.12	9.00	11	$\pm$ 20%	R56
APH0615TR68M	0.68	10.83	12.00	7.67	8.50	12	$\pm$ 20%	R68
APH0615TR82M	0.82	9.02	10.00	7.22	8.00	17	$\pm$ 20%	R82
APH0615T1R0M	1	8.12	9.00	5.41	6.00	21	$\pm$ 20%	1R0
APH0615T2R2M	2.2	6.31	7.00	3.43	3.80	54	$\pm$ 20%	2R2
APH0615T3R3M	3.3	4.96	5.50	3.16	3.50	63	$\pm$ 20%	3R3
APH0615T4R7M	4.7	4.51	5.00	2.89	3.20	85	$\pm$ 20%	4R7
APH0615T6R8M	6.8	3.61	4.00	2.25	2.50	135	$\pm$ 20%	6R8
APH0615T100M	10	2.70	3.00	1.80	2.00	175	$\pm$ 20%	100
APH0615T220M	22	2.25	2.50	1.33	1.40	510	$\pm$ 20%	220

### APH0618T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0618TR10M	0.1	31.54	38.00	23.30	25.00	2.3	$\pm$ 20%	R10
APH0618TR22M	0.22	19.92	24.00	20.30	22.00	3.5	$\pm$ 20%	R22
APH0618TR47M	0.47	14.94	18.00	10.23	11.50	8.4	$\pm$ 20%	R47
APH0618TR68M	0.68	13.70	16.50	8.57	9.50	12	$\pm$ 20%	R68
APH0618T1R0M	1	9.96	12.00	7.74	8.50	16	$\pm$ 20%	1R0
APH0618T1R5M	1.5	7.64	9.20	7.24	8.00	26	$\pm$ 20%	1R5
APH0618T2R2M	2.2	6.64	8.00	6.32	7.00	35	$\pm$ 20%	2R2
APH0618T3R3M	3.3	4.98	6.00	3.91	4.50	50	$\pm$ 20%	3R3
APH0618T4R7M	4.7	4.15	5.00	3.58	4.00	62	$\pm$ 20%	4R7
APH0618T6R8M	6.8	3.74	4.50	2.49	3.00	110	$\pm$ 20%	6R8
APH0618T8R2M	8.2	3.01	3.60	2.15	2.40	135	$\pm$ 20%	8R2
APH0618T100M	10	3.32	4.00	2.00	2.30	155	$\pm$ 20%	100
APH0618T220M	22	1.91	2.30	1.46	1.80	350	$\pm$ 20%	220

### APH0620T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0620T1R5M	1.5	10.30	12.00	7.15	8.00	18	$\pm$ 20%	1R5
APH0620T4R7M	4.7	-	5.50	-	4.30	60	$\pm$ 20%	4R7
APH0620T100M	10	-	4.00	-	2.80	145	$\pm$ 20%	100

### APH0624T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0624TR22M	0.22	24.90	30.00	19.30	21.00	3	$\pm$ 20%	R22
APH0624TR33M	0.33	20.34	24.50	16.30	18.00	4.1	$\pm$ 20%	R33
APH0624TR47M	0.47	16.60	20.00	13.73	15.00	5.1	$\pm$ 20%	R47
APH0624TR56M	0.56	14.11	17.00	11.73	13.00	6.5	$\pm$ 20%	R56
APH0624TR68M	0.68	13.28	16.00	10.73	12.00	7	$\pm$ 20%	R68
APH0624T1R0M	1	12.45	15.00	8.15	9.00	13.5	$\pm$ 20%	1R0
APH0624T1R5M	1.5	11.21	13.50	7.18	8.20	20	$\pm$ 20%	1R5
APH0624T2R2M	2.2	8.30	10.00	6.32	7.00	28	$\pm$ 20%	2R2

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### APH0624T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0624T3R3M	3.3	6.64	8.00	4.91	5.50	39	$\pm 20\%$	3R3
APH0624T4R7M	4.7	5.40	6.50	4.41	5.00	50	$\pm 20\%$	4R7
APH0624T6R8M	6.8	4.98	6.00	3.32	4.00	70	$\pm 20\%$	6R8
APH0624T100M	10	3.32	4.00	2.51	3.10	101	$\pm 20\%$	100
APH0624T150M	15	2.74	3.30	2.08	2.50	160	$\pm 20\%$	150
APH0624T220M	22	2.08	2.50	1.66	2.00	230	$\pm 20\%$	220

### APH0630T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0630TR10M	0.1	54.05	60.00	29.10	32.50	1.7	$\pm 20\%$	R10
APH0630TR12M	0.12	31.50	40.00	32.90	38.00	0.75	$\pm 20\%$	R12
APH0630TR22M	0.22	28.22	34.00	21.45	24.00	3	$\pm 20\%$	R22
APH0630TR24M	0.24	23.24	28.00	19.09	23.00	3.1	$\pm 20\%$	R24
APH0630TR33M	0.33	20.75	25.00	19.30	21.00	3.5	$\pm 20\%$	R33
APH0630TR47M	0.47	16.60	20.00	16.73	18.00	4.1	$\pm 20\%$	R47
APH0630TR56M	0.56	14.94	18.00	15.23	16.50	4.5	$\pm 20\%$	R56
APH0630TR68M	0.68	14.11	17.00	14.73	16.00	5.3	$\pm 20\%$	R68
APH0630TR82M	0.82	13.28	16.00	12.73	14.00	6	$\pm 20\%$	R82
APH0630T1R0M	1	12.45	15.00	10.73	12.00	7.4	$\pm 20\%$	1R0
APH0630T1R5M	1.5	9.96	12.00	10.73	12.00	12.1	$\pm 20\%$	1R5
APH0630T1R8M	1.8	9.76	11.80	8.37	9.30	12.6	$\pm 20\%$	1R8
APH0630T2R2M	2.2	8.30	10.00	8.65	9.50	15	$\pm 20\%$	2R2
APH0630T3R3M	3.3	7.89	9.50	7.65	8.50	22	$\pm 20\%$	3R3
APH0630T4R7M	4.7	7.47	9.00	5.15	6.00	33	$\pm 20\%$	4R7
APH0630T5R6M	5.6	5.40	6.50	4.91	5.50	42	$\pm 20\%$	5R6
APH0630T6R8M	6.8	4.98	6.00	4.32	5.00	48	$\pm 20\%$	6R8
APH0630T8R2M	8.2	4.57	5.50	4.32	5.00	60	$\pm 20\%$	8R2
APH0630T100M	10	4.57	5.50	3.91	4.50	68	$\pm 20\%$	100
APH0630T150M	15	3.32	4.00	2.41	3.00	113	$\pm 20\%$	150
APH0630T220M	22	2.49	3.00	2.08	2.50	170	$\pm 20\%$	220
APH0630T330M	33	2.08	2.50	1.66	2.00	270	$\pm 20\%$	330
APH0630T470M	47	1.66	2.00	1.25	1.50	385	$\pm 20\%$	470

### APH0640T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0640TR68M	0.68	-	19.00	-	17.00	4.8	$\pm 20\%$	R68
APH0640T1R0M	1	-	16.00	-	13.50	6.6	$\pm 20\%$	1R0
APH0640T1R5M	1.5	-	12.50	-	12.40	10	$\pm 20\%$	1R5
APH0640T2R2M	2.2	9.13	11.00	8.13	10.00	14	$\pm 20\%$	2R2
APH0640T3R3M	3.3	-	9.50	-	8.50	20	$\pm 20\%$	3R3
APH0640T4R7M	4.7	7.47	9.00	6.08	6.50	30	$\pm 20\%$	4R7
APH0640T6R8M	6.8	-	6.50	-	5.50	45	$\pm 20\%$	6R8
APH0640T100M	10	-	6.00	-	4.80	65	$\pm 20\%$	100
APH0640T150M	15	3.74	4.50	2.94	3.70	95	$\pm 20\%$	150
APH0640T220M	22	-	4.00	-	3.30	125	$\pm 20\%$	220
APH0640T330M	33	-	3.00	-	2.20	240	$\pm 20\%$	330
APH0640T470M	47	-	2.50	-	1.80	320	$\pm 20\%$	470

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### APH0650T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0650TR47M	0.47	17.43	21.00	17.45	20.00	3.9	$\pm 20\%$	R47
APH0650TR68M	0.68	14.94	18.00	14.80	16.50	4.5	$\pm 20\%$	R68
APH0650T1R0M	1	13.28	16.00	10.30	12.00	6.6	$\pm 20\%$	1R0
APH0650T1R5M	1.5	10.79	13.00	8.40	9.50	10	$\pm 20\%$	1R5
APH0650T2R2M	2.2	9.13	11.00	8.15	9.00	12.5	$\pm 20\%$	2R2
APH0650T3R3M	3.3	8.30	10.00	7.74	8.50	22	$\pm 20\%$	3R3
APH0650T4R7M	4.7	6.64	8.00	5.15	6.00	29	$\pm 20\%$	4R7
APH0650T6R8M	6.8	5.23	6.30	4.27	5.80	41	$\pm 20\%$	6R8
APH0650T8R2M	8.2	4.57	5.50	4.91	5.50	48	$\pm 20\%$	8R2
APH0650T100M	10	4.40	5.30	3.91	4.50	60	$\pm 20\%$	100
APH0650T150M	15	3.32	4.00	2.68	3.10	90	$\pm 20\%$	150
APH0650T220M	22	2.91	3.50	2.09	2.60	140	$\pm 20\%$	220
APH0650T330M	33	2.49	3.00	1.88	2.30	190	$\pm 20\%$	330
APH0650T470M	47	2.16	2.60	1.58	2.00	230	$\pm 20\%$	470

### APH0840T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH0840TR22M	0.22	55.75	60.00	30.90	36.00	1.8	$\pm 20\%$	R22
APH0840TR33M	0.33	40.75	45.00	25.75	30.00	2.4	$\pm 20\%$	R33
APH0840TR47M	0.47	36.90	42.00	25.45	28.00	2.8	$\pm 20\%$	R47
APH0840TR56M	0.56	23.45	26.00	22.30	24.00	3.2	$\pm 20\%$	R56
APH0840TR68M	0.68	22.30	24.00	21.30	23.00	3.8	$\pm 20\%$	R68
APH0840TR82M	0.82	19.30	21.00	19.30	21.00	4.4	$\pm 20\%$	R82
APH0840T1R0M	1	17.30	19.00	17.30	19.00	4.62	$\pm 20\%$	1R0
APH0840T1R5M	1.5	15.30	17.00	15.30	17.00	7.6	$\pm 20\%$	1R5
APH0840T1R8M	1.8	13.73	15.00	12.88	15.00	11	$\pm 20\%$	1R8
APH0840T2R2M	2.2	12.30	14.00	12.30	14.00	11.4	$\pm 20\%$	2R2
APH0840T3R3M	3.3	11.23	12.50	10.30	12.00	15	$\pm 20\%$	3R3
APH0840T4R7M	4.7	10.65	11.50	8.65	9.50	26.5	$\pm 20\%$	4R7
APH0840T5R6M	5.6	10.15	11.00	8.15	9.00	30	$\pm 20\%$	5R6
APH0840T6R8M	6.8	8.15	9.00	7.15	8.00	36.8	$\pm 20\%$	6R8
APH0840T8R2M	8.2	7.85	8.70	6.15	7.00	46	$\pm 20\%$	8R2
APH0840T100M	10	7.15	8.00	5.65	6.50	59	$\pm 20\%$	100
APH0840T150M	15	4.99	5.50	4.89	5.40	71	$\pm 20\%$	150
APH0840T220M	22	4.58	5.00	4.29	4.80	113	$\pm 20\%$	220
APH0840T330M	33	3.33	3.50	3.08	3.50	156	$\pm 20\%$	330
APH0840T470M	47	2.93	3.10	2.56	2.90	225	$\pm 20\%$	470

### APH1030T series

Part Number	Inductance( $\mu$ H) @100KHz,1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH1030TR22M	0.22	45.10	50.00	29.77	33.00	1.2	$\pm 20\%$	R22
APH1030TR33M	0.33	28.86	32.00	20.75	23.00	1.6	$\pm 20\%$	R33
APH1030TR36M	0.36	25.28	28.00	20.75	23.00	1.6	$\pm 20\%$	R36
APH1030TR47M	0.47	23.45	26.00	19.85	22.00	2.5	$\pm 20\%$	R47
APH1030TR82M	0.82	20.75	23.00	16.24	18.00	3.7	$\pm 20\%$	R82
APH1030T1R0M	1	18.94	21.00	13.53	15.00	6	$\pm 20\%$	1R0
APH1030T1R5M	1.5	18.04	20.00	11.73	13.00	7.5	$\pm 20\%$	1R5
APH1030T2R2M	2.2	12.62	14.00	9.92	11.00	9	$\pm 20\%$	2R2

## Molded SMD Power Inductors APH Series

### APH1030T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH1030T3R3M	3.3	10.82	12.00	8.12	9.00	16	$\pm$ 20%	3R3
APH1030T4R7M	4.7	9.01	10.00	6.31	7.00	22.5	$\pm$ 20%	4R7
APH1030T8R2M	8.2	6.32	7.00	4.51	5.00	45	$\pm$ 20%	8R2
APH1030T100M	10	5.86	6.50	4.06	4.50	55	$\pm$ 20%	100
APH1030T330M	33	3.60	4.00	2.35	2.60	160	$\pm$ 20%	330

### APH1040T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH1040TR13M	0.13	67.35	92.00	64.35	72.00	0.52	$\pm$ 20%	R13
APH1040TR15M	0.15	62.25	75.00	40.75	45.00	0.65	$\pm$ 20%	R15
APH1040TR22M	0.22	49.80	60.00	30.75	35.00	1	$\pm$ 20%	R22
APH1040TR30M	0.3	37.35	45.00	30.75	35.00	1.1	$\pm$ 20%	R30
APH1040TR36M	0.36	37.35	45.00	25.75	30.00	1.2	$\pm$ 20%	R36
APH1040TR45M	0.45	35.35	43.00	25.75	30.00	1.5	$\pm$ 20%	R45
APH1040TR47M	0.47	33.20	40.00	25.75	30.00	1.7	$\pm$ 20%	R47
APH1040TR56M	0.56	27.39	33.00	20.75	25.00	1.8	$\pm$ 20%	R56
APH1040TR68M	0.68	24.90	30.00	19.60	23.00	2.4	$\pm$ 20%	R68
APH1040TR80M	0.8	24.07	29.00	19.60	23.00	2.7	$\pm$ 20%	R80
APH1040T1R0M	1	23.24	28.00	16.45	19.00	3.3	$\pm$ 20%	1R0
APH1040T1R5M	1.5	19.92	24.00	14.30	16.00	4.2	$\pm$ 20%	1R5
APH1040T2R2M	2.2	13.70	16.50	10.30	12.00	7	$\pm$ 20%	2R2
APH1040T3R3M	3.3	13.28	16.00	9.73	11.00	11.8	$\pm$ 20%	3R3
APH1040T4R7M	4.7	10.79	13.00	7.73	9.00	20	$\pm$ 20%	4R7
APH1040T6R8M	6.8	9.96	12.00	7.23	8.50	25	$\pm$ 20%	6R8
APH1040T8R2M	8.2	7.47	9.00	6.98	8.00	27	$\pm$ 20%	8R2
APH1040T100M	10	7.06	8.50	7.04	7.80	30	$\pm$ 20%	100
APH1040T150M	15	5.81	7.00	5.74	6.50	45	$\pm$ 20%	150
APH1040T220M	22	4.57	5.50	4.32	5.00	66	$\pm$ 20%	220
APH1040T330M	33	3.98	4.80	3.89	4.40	92	$\pm$ 20%	330
APH1040T470M	47	3.16	3.50	2.88	3.30	145	$\pm$ 20%	470
APH1040T680M	68	2.49	3.00	2.08	2.50	195	$\pm$ 20%	680
APH1040T820M	82	2.38	2.80	2.13	2.30	285	$\pm$ 20%	820
APH1040T101M	100	2.13	2.30	1.83	2.00	340	$\pm$ 20%	101

### APH1050T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH1050TR22M	0.22	58.63	65.00	33.18	37.00	0.8	$\pm$ 20%	R22
APH1050TR68M	0.68	34.45	37.00	21.30	23.00	1.95	$\pm$ 20%	R68
APH1050T1R0M	1	28.30	30.00	20.71	23.00	3	$\pm$ 20%	1R0
APH1050T1R5M	1.5	22.45	25.00	18.88	21.00	3.8	$\pm$ 20%	1R5
APH1050T2R2M	2.2	17.13	19.00	13.47	15.00	6	$\pm$ 20%	2R2
APH1050T3R3M	3.3	14.30	16.00	11.73	13.00	10	$\pm$ 20%	3R3
APH1050T4R7M	4.7	13.47	15.00	9.90	11.00	14	$\pm$ 20%	4R7
APH1050T5R6M	5.6	12.56	14.00	8.65	9.50	17	$\pm$ 20%	5R6
APH1050T6R8M	6.8	12.56	14.00	8.15	9.00	18.5	$\pm$ 20%	6R8
APH1050T100M	10	8.98	10.00	7.15	8.00	28	$\pm$ 20%	100
APH1050T150M	15	6.65	7.50	5.82	6.50	42	$\pm$ 20%	150
APH1050T220M	22	5.41	6.00	5.08	5.50	50	$\pm$ 20%	220

## Molded SMD Power Inductors APH Series

### APH1050T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH1050T330M	33	4.69	5.20	4.29	4.80	86	$\pm$ 20%	330
APH1050T470M	47	4.08	4.50	3.28	3.70	127	$\pm$ 20%	470
APH1050T680M	68	2.86	3.20	2.45	2.70	185	$\pm$ 20%	680
APH1050T820M	82	3.08	3.50	1.75	2.00	280	$\pm$ 20%	820
APH1050T101M	100	2.55	2.80	1.85	2.10	290	$\pm$ 20%	101

### APH1240T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH1240TR22M	0.22	41.50	50.00	38.60	42.00	0.9	$\pm$ 20%	R22
APH1240TR47M	0.47	39.84	48.00	29.60	33.00	2	$\pm$ 20%	R47
APH1240TR68M	0.68	39.01	47.00	24.60	28.00	3.5	$\pm$ 20%	R68
APH1240TR82M	0.82	33.20	40.00	24.60	28.00	4.5	$\pm$ 20%	R82
APH1240T1R0M	1	29.05	35.00	20.60	24.00	7.5	$\pm$ 20%	1R0
APH1240T1R5M	1.5	25.32	30.50	17.45	20.00	9.5	$\pm$ 20%	1R5
APH1240T2R2M	2.2	21.58	26.00	15.45	18.00	11.5	$\pm$ 20%	2R2
APH1240T3R3M	3.3	17.43	21.00	13.30	15.00	13	$\pm$ 20%	3R3
APH1240T4R7M	4.7	14.94	18.00	11.30	13.00	14.5	$\pm$ 20%	4R7
APH1240T6R8M	6.8	11.62	14.00	8.15	9.00	20	$\pm$ 20%	6R8
APH1240T100M	10	8.30	10.00	7.15	8.00	25	$\pm$ 20%	100
APH1240T150M	15	6.23	7.50	5.91	6.50	39	$\pm$ 20%	150
APH1240T220M	22	4.98	6.00	3.91	4.50	51	$\pm$ 20%	220

### APH1250T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH1250TR22M	0.22	62.25	75.00	45.75	50.00	0.7	$\pm$ 20%	R22
APH1250TR36M	0.36	41.50	50.00	37.75	42.00	0.85	$\pm$ 20%	R36
APH1250TR50M	0.5	39.84	48.00	33.75	38.00	1.15	$\pm$ 20%	R50
APH1250TR68M	0.68	38.18	46.00	29.60	33.00	1.55	$\pm$ 20%	R68
APH1250TR82M	0.82	32.37	39.00	26.60	30.00	1.67	$\pm$ 20%	R82
APH1250T1R0M	1	29.05	35.00	22.60	26.00	2.2	$\pm$ 20%	1R0
APH1250T1R5M	1.5	27.39	33.00	19.60	23.00	3.2	$\pm$ 20%	1R5
APH1250T2R2M	2.2	19.92	24.00	13.30	15.00	5	$\pm$ 20%	2R2
APH1250T3R3M	3.3	18.26	22.00	12.30	14.00	7	$\pm$ 20%	3R3
APH1250T4R7M	4.7	16.60	20.00	11.30	13.00	9	$\pm$ 20%	4R7
APH1250T6R8M	6.8	13.28	16.00	10.30	12.00	18	$\pm$ 20%	6R8
APH1250T100M	10	9.96	12.00	8.15	9.00	22	$\pm$ 20%	100
APH1250T150M	15	8.30	10.00	7.15	8.00	30	$\pm$ 20%	150
APH1250T220M	22	5.40	6.50	3.91	4.50	58	$\pm$ 20%	220
APH1250T330M	33	4.98	6.00	2.91	3.50	84	$\pm$ 20%	330
APH1250T470M	47	4.15	5.00	2.66	3.00	130	$\pm$ 20%	470



## Molded SMD Power Inductors APH Series

### APH1260T series

Part Number	Inductance( $\mu$ H)	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ )	Inductance	Marking
	@100KHz,1V	Max.	Typ.	Max.	Typ.	Max.	Tolerance	
APH1260T1R5M	1.5	27.45	30.00	23.60	27.00	2.9	$\pm 20\%$	1R5
APH1260T2R2M	2.2	24.60	28.00	18.60	22.00	4.2	$\pm 20\%$	2R2
APH1260T3R3M	3.3	21.60	25.00	14.45	17.00	6.8	$\pm 20\%$	3R3
APH1260T4R7M	4.7	19.92	24.00	12.45	15.00	9	$\pm 20\%$	4R7
APH1260T5R6M	5.6	18.68	22.50	11.30	13.00	11	$\pm 20\%$	5R6
APH1260T6R8M	6.8	15.77	19.00	10.30	12.00	13.5	$\pm 20\%$	6R8
APH1260T8R2M	8.2	11.21	13.50	9.30	11.00	16	$\pm 20\%$	8R2
APH1260T100M	10	11.31	12.50	8.73	10.00	20.7	$\pm 20\%$	100
APH1260T120M	12	8.30	10.00	7.98	9.00	23	$\pm 20\%$	120
APH1260T150M	15	7.47	9.00	7.65	8.50	29	$\pm 20\%$	150
APH1260T180M	18	6.64	8.00	6.65	7.50	35	$\pm 20\%$	180
APH1260T220M	22	6.23	7.50	6.15	7.00	39.5	$\pm 20\%$	220
APH1260T270M	27	5.40	6.50	5.15	6.00	56	$\pm 20\%$	270
APH1260T330M	33	4.98	6.00	4.91	5.50	75	$\pm 20\%$	330
APH1260T470M	47	4.57	5.50	4.32	5.00	90	$\pm 20\%$	470
APH1260T680M	68	3.74	4.50	3.32	4.00	140	$\pm 20\%$	680
APH1260T101M	100	2.91	3.50	2.58	3.00	200	$\pm 20\%$	101
APH1260T121M	120	2.66	3.20	1.75	2.00	235	$\pm 20\%$	121
APH1260T151M	150	2.24	2.70	1.25	1.50	350	$\pm 20\%$	151

### APH1265T series

Part Number	Inductance( $\mu$ H)	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ )	Inductance	Marking
	@100KHz,1V	Max.	Typ.	Max.	Typ.	Max.	Tolerance	
APH1265T4R7M	4.7	-	24	-	16	8.5	$\pm 20\%$	4R7
APH1265T5R6M	5.6	-	22.5	-	14	10.5	$\pm 20\%$	5R6
APH1265T6R8M	6.8	-	19	-	13	12	$\pm 20\%$	6R8
APH1265T8R2M	8.2	-	16	-	12	14	$\pm 20\%$	8R2
APH1265T100M	10	-	15	-	11	16.5	$\pm 20\%$	100
APH1265T150M	15	-	11	-	9.5	26	$\pm 20\%$	150
APH1265T220M	22	-	9	-	8	36	$\pm 20\%$	220
APH1265T330M	33	-	8	-	6.5	65	$\pm 20\%$	330
APH1265T470M	47	-	6.8	-	5.5	70	$\pm 20\%$	470
APH1265T680M	68	-	5.2	-	4.8	120	$\pm 20\%$	680
APH1265T820M	82	-	4.5	-	4	135	$\pm 20\%$	820
APH1265T101M	100	-	4	-	3.5	170	$\pm 20\%$	101

## Molded SMD Power Inductors APH Series

### APH1770T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH1770T2R2M	2.2	-	34.00	-	29.00	2.5	$\pm 20\%$	2R2
APH1770T3R3M	3.3	-	30.00	-	24.00	3.95	$\pm 20\%$	3R3
APH1770T4R7M	4.7	-	24.00	-	21.00	4.75	$\pm 20\%$	4R7
APH1770T6R8M	6.8	-	22.00	-	17.00	7.5	$\pm 20\%$	6R8
APH1770T8R2M	8.2	-	20.00	-	13.00	8.7	$\pm 20\%$	8R2
APH1770T100M	10	-	19.00	-	12.00	9.9	$\pm 20\%$	100
APH1770T150M	15	-	14.50	-	11.00	17	$\pm 20\%$	150
APH1770T220M	22	-	11.50	-	8.50	23	$\pm 20\%$	220
APH1770T330M	33	-	10.00	-	8.00	37	$\pm 20\%$	330
APH1770T470M	47	-	7.50	-	6.00	47	$\pm 20\%$	470
APH1770T680M	68	-	6.50	-	5.20	85	$\pm 20\%$	680
APH1770T101M	100	-	5.00	-	3.70	130	$\pm 20\%$	101

### APH2213T series

Part Number	Inductance( $\mu$ H) @100KHz, 1V	Saturation Current (A)		Heat Rating Current(A)		DCR(m $\Omega$ ) Max.	Inductance Tolerance	Marking
		Max.	Typ.	Max.	Typ.			
APH2213T2R2M	2.2	43.75	48.00	52.00	52.90	1.25	$\pm 20\%$	2R2
APH2213T4R7M	4.7	34.60	38.00	44.00	44.45	2.2	$\pm 20\%$	4R7
APH2213T100M	10	21.20	28.00	30.00	30.45	4.15	$\pm 20\%$	100
APH2213T150M	15	18.75	23.00	23.00	23.45	6.12	$\pm 20\%$	150
APH2213T680M	68	9.45	12.00	12.00	12.30	29.5	$\pm 20\%$	680

△1: All test data is referenced to 20°C ambient;

△2: Rated current: Isat or Irms, whichever is smaller;

△3: Isat(Typ): DC current at which the inductance drops approximate 30% from its value without current;

△4: Isat(Max): DC current at which the inductance drops approximate 20% from its value without current;

△5: Irms(Typ): DC current that causes the temperature rise ( $\Delta T = 40^\circ\text{C}$ ) from 20°C ambient.

△6: Irms(Max): DC current that causes the temperature rise ( $\Delta T = 20^\circ\text{C}$ ) from 20°C ambient.

△7: Absolute maximum voltage 30VDC

#### Note:

1. Operating temperature range  $-40^\circ\text{C} \sim 125^\circ\text{C}$  (Including self - temperature rise)

2. Rated Current: Inductance drop = 35% typ.

3. Irms for a 40°C temperature rise from 25°C ambient with current

4. Measure Equipment:

L: Agilent E4980 or HP4284A

RDC: CH502BC

Rate Current: HP4284+42841A or WK3260B+WK3265B

Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without APV approval.







