

SMD POWER INDUCTORS / ATPI HF Series

• Features

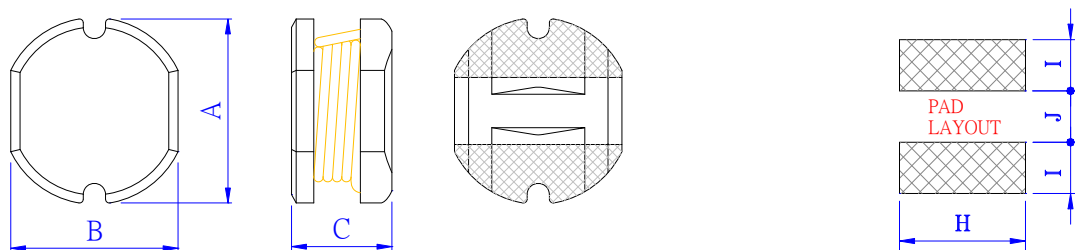
1. Applicable at high frequency.
2. Excellent solderability and high heat resistance
3. Excellent terminal strength construction.
4. Packed in embossed carrier tape and can be used by automatic mounting machine.

• Applications

Power supply for VCR,OA equipment ,LCD television set, notebook, DC to DC converters, DC to AC inverters etc.

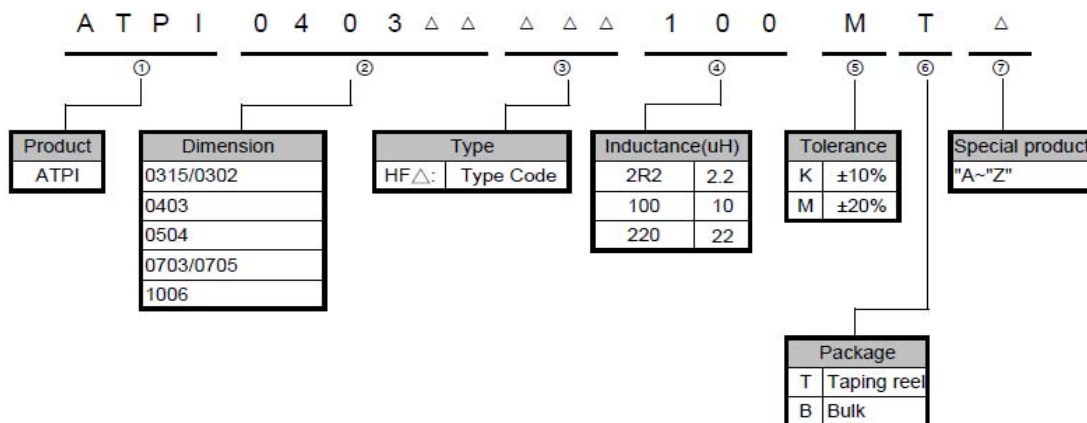


• Shape & Dimensions



TYPE	A (mm)	B (mm)	C (mm)	H (Ref.)	I (Ref.)	J (Ref.)
ATPI0315HF	3.5 ± 0.3	3.0 ± 0.3	1.6 ± 0.3	3.0	1.25	1.0
ATPI0302HF	3.5 ± 0.3	3.0 ± 0.3	2.1 ± 0.3	3.5	1.5	1.0
ATPI0403HF	4.5 ± 0.3	4.0 ± 0.3	3.2 ± 0.3	4.5	1.8	1.5
ATPI0504HF	5.8 ± 0.3	5.2 ± 0.3	4.5 ± 0.4	5.5	2.2	1.7
ATPI0703HF	7.8 ± 0.3	7.0 ± 0.3	3.5 ± 0.5	7.5	3.0	2.0
ATPI0705HF	7.8 ± 0.3	7.0 ± 0.3	5.0 ± 0.5	7.5	3.0	2.0
ATPI1006HF	10.0 ± 0.4	9.0 ± 0.4	6.5 ± 0.4	9.0	3.4	3.2

■ PRODUCT IDENTIFICATION



◆ ATPI0315HF Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR ($m\Omega$) $\pm 30\%$	Saturation Current (A) Max.
ATPI0315HF2R2□T	2.2	Y	1	100	0.79
ATPI0315HF3R3□T	3.3	Y	1	110	0.73
ATPI0315HF4R7□T	4.7	Y	1	150	0.65
ATPI0315HF5R6□T	5.6	M	1	150	0.60
ATPI0315HF6R8□T	6.8	M	1	200	0.77
ATPI0315HF100□T	10	K,M	1	300	0.45
ATPI0315HF150□T	15	K,M	1	580	0.30
ATPI0315HF220□T	22	K,M	1	710	0.25
ATPI0315HF330□T	33	K,M	1	1100	0.20
ATPI0315HF390□T	39	K,M	1	1300	0.17
ATPI0315HF470□T	47	K,M	1	1300	0.17
ATPI0315HF680□T	68	K,M	1	2200	0.13
ATPI0315HF101□T	100	K,M	1	3500	0.10
ATPI0315HF221□T	220	K,M	1	10920(Max.)	0.07

NOTE :

* The operating temperature range is -40°C to $+125^{\circ}\text{C}$ (Including self-temperature rise)

* □ Tolerance K : $\pm 10\%$, M : $\pm 20\%$, Y : $\pm 30\%$

*Isat:For Inductance drop 10% from its value without current.

◆ ATPI0302HF Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR (m Ω) Max.	Saturation Current (A) Max.
ATPI0302HF1R0□T	1.0	Y	7.96	70	2.08
ATPI0302HF1R4□T	1.4	Y	7.96	90	1.86
ATPI0302HF1R5□T	1.5	Y	7.96	110	1.80
ATPI0302HF1R8□T	1.8	Y	7.96	110	1.80
ATPI0302HF2R2□T	2.2	Y	7.96	130	1.39
ATPI0302HF2R7□T	2.7	Y	7.96	140	1.32
ATPI0302HF3R3□T	3.3	Y	7.96	170	1.25
ATPI0302HF3R9□T	3.9	Y	7.96	190	1.20
ATPI0302HF4R7□T	4.7	Y	7.96	210	1.13
ATPI0302HF5R6□T	5.6	M	7.96	220	0.91
ATPI0302HF6R8□T	6.8	M	7.96	250	0.85
ATPI0302HF7R0□T	7.0	M	7.96	280	0.82
ATPI0302HF8R2□T	8.2	M	7.96	280	0.82
ATPI0302HF100□T	10	K,M	2.52	320	0.74
ATPI0302HF120□T	12	K,M	2.52	350	0.64
ATPI0302HF150□T	15	K,M	2.52	400	0.60
ATPI0302HF180□T	18	K,M	2.52	480	0.54
ATPI0302HF220□T	22	K,M	2.52	580	0.50
ATPI0302HF270□T	27	K,M	2.52	650	0.43
ATPI0302HF330□T	33	K,M	2.52	800	0.40
ATPI0302HF390□T	39	K,M	2.52	900	0.37
ATPI0302HF470□T	47	K,M	2.52	1190	0.36
ATPI0302HF500□T	50	K,M	2.52	1220	0.33
ATPI0302HF560□T	56	K,M	2.52	1270	0.31
ATPI0302HF680□T	68	K,M	2.52	1730	0.30
ATPI0302HF750□T	75	K,M	2.52	1900	0.29
ATPI0302HF820□T	82	K,M	2.52	1990	0.28
ATPI0302HF101□T	100	K,M	1(KHz)	2520	0.25
ATPI0302HF121□T	120	K,M	1(KHz)	2900	0.20
ATPI0302HF151□T	150	K,M	1(KHz)	3360	0.19
ATPI0302HF181□T	180	K,M	1(KHz)	5100	0.17
ATPI0302HF221□T	220	K,M	1(KHz)	5800	0.16
ATPI0302HF271□T	270	K,M	1(KHz)	7800	0.14

NOTE :

* The operating temperature range is -40°C to +125°C (Including self-temperature rise)

* □ Tolerance K : $\pm 10\%$, M : $\pm 20\%$, Y : $\pm 30\%$

*Isat:For Inductance drop 10% from its value without current.

◆ ATPI0403HF Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR (m Ω) Max.	Saturation Current (A) Max.
ATPI0403HF1R0□T	1.0	Y	7.96	33	3.80
ATPI0403HF1R2□T	1.2	Y	7.96	35	3.50
ATPI0403HF1R4□T	1.4	Y	7.96	38	3.30
ATPI0403HF1R8□T	1.8	Y	7.96	42	2.91
ATPI0403HF2R2□T	2.2	Y	7.96	47	2.60
ATPI0403HF2R7□T	2.7	Y	7.96	52	2.43
ATPI0403HF3R3□T	3.3	Y	7.96	58	2.15
ATPI0403HF3R9□T	3.9	Y	7.96	76	1.98
ATPI0403HF4R7□T	4.7	Y	7.96	94	1.70
ATPI0403HF5R6□T	5.6	M	7.96	101	1.60
ATPI0403HF6R2□T	6.2	M	7.96	110	1.50
ATPI0403HF6R8□T	6.8	M	7.96	117	1.41
ATPI0403HF8R2□T	8.2	M	7.96	132	1.26
ATPI0403HF100□T	10	K,M	2.52	182	1.15
ATPI0403HF120□T	12	K,M	2.52	210	1.05
ATPI0403HF150□T	15	K,M	2.52	235	0.92
ATPI0403HF180□T	18	K,M	2.52	338	0.84
ATPI0403HF220□T	22	K,M	2.52	378	0.76
ATPI0403HF270□T	27	K,M	2.52	522	0.71
ATPI0403HF330□T	33	K,M	2.52	540	0.64
ATPI0403HF390□T	39	K,M	2.52	587	0.59
ATPI0403HF470□T	47	K,M	2.52	844	0.54
ATPI0403HF560□T	56	K,M	2.52	937	0.50
ATPI0403HF680□T	68	K,M	2.52	1117	0.46
ATPI0403HF101□T	100	K,M	1(KHz)	2000	0.40
ATPI0403HF121□T	120	K,M	1(KHz)	1800	0.38
ATPI0403HF151□T	150	K,M	1(KHz)	2800	0.30
ATPI0403HF181□T	180	K,M	1(KHz)	3200	0.25
ATPI0403HF221□T	220	K,M	1(KHz)	4000	0.15
ATPI0403HF331□T	330	K,M	1(KHz)	5850	0.21

NOTE :

* The operating temperature range is -40°C to +125°C (Including self-temperature rise)

* □ Tolerance K : $\pm 10\%$, M : $\pm 20\%$, Y : $\pm 30\%$

*Isat:For Inductance drop 10% from its value without current.

◆ ATPI0504HF Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR (m Ω) Max.	Saturation Current (A) Max.
ATPI0504HF1R8□T	1.8	Y	7.96	20.0	3.50
ATPI0504HF2R2□T	2.2	Y	7.96	23.0	3.20
ATPI0504HF3R3□T	3.3	Y	7.96	31.4	2.59
ATPI0504HF3R5□T	3.5	Y	7.96	30.0	2.40
ATPI0504HF4R7□T	4.7	Y	7.96	37.2	2.30
ATPI0504HF6R8□T	6.8	M	7.96	57.0	1.80
ATPI0504HF100□T	10	K,M	2.52	100	1.44
ATPI0504HF120□T	12	K,M	2.52	120	1.40
ATPI0504HF150□T	15	K,M	2.52	140	1.30
ATPI0504HF180□T	18	K,M	2.52	150	1.23
ATPI0504HF220□T	22	K,M	2.52	180	1.11
ATPI0504HF270□T	27	K,M	2.52	200	0.97
ATPI0504HF330□T	33	K,M	2.52	230	0.88
ATPI0504HF390□T	39	K,M	2.52	320	0.80
ATPI0504HF470□T	47	K,M	2.52	370	0.72
ATPI0504HF560□T	56	K,M	2.52	420	0.68
ATPI0504HF680□T	68	K,M	2.52	460	0.61
ATPI0504HF820□T	82	K,M	2.52	600	0.58
ATPI0504HF101□T	100	K,M	1(KHz)	700	0.52
ATPI0504HF121□T	120	K,M	1(KHz)	930	0.48
ATPI0504HF151□T	150	K,M	1(KHz)	1100	0.40
ATPI0504HF181□T	180	K,M	1(KHz)	1380	0.38
ATPI0504HF221□T	220	K,M	1(KHz)	1570	0.35
ATPI0504HF271□T	270	K,M	1(KHz)	1850	0.29
ATPI0504HF331□T	330	K,M	1(KHz)	2000	0.28
ATPI0504HF391□T	390	K,M	1(KHz)	2600	0.26
ATPI0504HF471□T	470	K,M	1(KHz)	3000	0.12
ATPI0504HF561□T	560	K,M	1(KHz)	4190	0.10
ATPI0504HF681□T	680	K,M	1(KHz)	4440	0.08
ATPI0504HF821□T	820	K,M	1(KHz)	5120	0.05
ATPI0504HF102□T	1000	K,M	1(KHz)	10000	0.03

NOTE :

* The operating temperature range is -40°C to +125°C (Including self-temperature rise)

* □ Tolerance K : $\pm 10\%$, M : $\pm 20\%$, Y : $\pm 30\%$

*Isat:For Inductance drop 10% from its value without current.

◆ ATPI0703HF Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR (m Ω) Max.	Saturation Current (A) Max.
ATPI0703HF2R2□T	2.2	Y	7.96	30	3.20
ATPI0703HF4R7□T	4.7	Y	7.96	40	1.60
ATPI0703HF100□T	10	K,M	2.52	80	1.44
ATPI0703HF120□T	12	K,M	2.52	90	1.39
ATPI0703HF150□T	15	K,M	2.52	100	1.24
ATPI0703HF180□T	18	K,M	2.52	110	1.12
ATPI0703HF220□T	22	K,M	2.52	130	1.07
ATPI0703HF270□T	27	K,M	2.52	150	0.94
ATPI0703HF330□T	33	K,M	2.52	170	0.85
ATPI0703HF390□T	39	K,M	2.52	220	0.74
ATPI0703HF470□T	47	K,M	2.52	250	0.68
ATPI0703HF560□T	56	K,M	2.52	280	0.64
ATPI0703HF680□T	68	K,M	2.52	330	0.59
ATPI0703HF820□T	82	K,M	2.52	410	0.54
ATPI0703HF101□T	100	K,M	1(KHz)	480	0.51
ATPI0703HF121□T	120	K,M	1(KHz)	540	0.49
ATPI0703HF151□T	150	K,M	1(KHz)	750	0.40
ATPI0703HF181□T	180	K,M	1(KHz)	1020	0.36
ATPI0703HF221□T	220	K,M	1(KHz)	1200	0.31
ATPI0703HF271□T	270	K,M	1(KHz)	1310	0.29
ATPI0703HF331□T	330	K,M	1(KHz)	1500	0.28
ATPI0703HF561□T	560	K,M	1(KHz)	2500	0.14

NOTE :

* The operating temperature range is -40°C to +125°C (Including self-temperature rise)

* □ Tolerance K : $\pm 10\%$, M : $\pm 20\%$, Y : $\pm 30\%$

* Isat: For Inductance drop 10% from its value without current.

◆ ATPI0705HF Series Specification :

Part Number	Inductance (μ H)	Inductance Tolerance	Test Freq. (MHz)	DCR (m Ω) Max.	Saturation Current (A) Max.
ATPI0705HF1R4□T	1.4	Y	7.96	20	3.70
ATPI0705HF1R5□T	1.5	Y	7.96	20	3.70
ATPI0705HF1R8□T	1.8	Y	7.96	20	3.70
ATPI0705HF2R2□T	2.2	Y	7.96	20	3.70
ATPI0705HF2R7□T	2.7	Y	7.96	20	3.70
ATPI0705HF3R0□T	3.0	Y	7.96	25	3.70
ATPI0705HF3R3□T	3.3	Y	7.96	30	3.70
ATPI0705HF3R9□T	3.9	Y	7.96	30	3.70
ATPI0705HF4R7□T	4.7	Y	7.96	40	3.50
ATPI0705HF5R6□T	5.6	M	7.96	40	3.30
ATPI0705HF6R8□T	6.8	M	7.96	40	3.10
ATPI0705HF8R2□T	8.2	M	7.96	50	2.70
ATPI0705HF100□T	10	K,M	2.52	70	2.30
ATPI0705HF120□T	12	K,M	2.52	80	2.00
ATPI0705HF150□T	15	K,M	2.52	90	1.80
ATPI0705HF180□T	18	K,M	2.52	100	1.60
ATPI0705HF220□T	22	K,M	2.52	110	1.50
ATPI0705HF270□T	27	K,M	2.52	120	1.30
ATPI0705HF330□T	33	K,M	2.52	130	1.20
ATPI0705HF390□T	39	K,M	2.52	160	1.10
ATPI0705HF470□T	47	K,M	2.52	180	1.10
ATPI0705HF560□T	56	K,M	2.52	240	0.94
ATPI0705HF680□T	68	K,M	2.52	280	0.85
ATPI0705HF820□T	82	K,M	2.52	370	0.78
ATPI0705HF101□T	100	K,M	1(KHz)	430	0.72
ATPI0705HF121□T	120	K,M	1(KHz)	470	0.66
ATPI0705HF151□T	150	K,M	1(KHz)	640	0.58
ATPI0705HF181□T	180	K,M	1(KHz)	710	0.51
ATPI0705HF221□T	220	K,M	1(KHz)	960	0.49
ATPI0705HF271□T	270	K,M	1(KHz)	1110	0.42
ATPI0705HF331□T	330	K,M	1(KHz)	1260	0.40
ATPI0705HF391□T	390	K,M	1(KHz)	1770	0.36
ATPI0705HF471□T	470	K,M	1(KHz)	1960	0.34
ATPI0705HF561□T	560	K,M	1(KHz)	2410	0.32

NOTE :

* The operating temperature range is -40°C to +125°C (Including self-temperature rise)

* □ Tolerance K : $\pm 10\%$, M : $\pm 20\%$, Y : $\pm 30\%$

*Isat:For Inductance drop 10% from its value without current.

◆ ATPI1006HF Series Specification :

Part Number	Inductance (uH)	Inductance Tolerance	Test Freq. (KHz)	DCR (Ω) Max.	Saturation Current (A) Max.
ATPI1006HF220□T	22	K,M	2.52(MHz)	0.080	3.80
ATPI1006HF471□T	470	K,M	1	1.421	0.82
ATPI1006HF102□T	1000	K,M	1	2.90	0.60
ATPI1006HF122□T	1200	K,M	1	3.50	0.50
ATPI1006HF152□T	1500	K,M	1	3.80	0.60
ATPI1006HF202□T	2000	K,M	1	6.60	0.40
ATPI1006HF222□T	2200	K,M	1	8.00	0.40
ATPI1006HF602□T	6000	K,M	1	14.00	0.27
ATPI1006HF822□T	8200	K,M	1	50.00	0.20

NOTE :

* The operating temperature range is -40°C to +105°C (Including self-temperature rise)

* □ Tolerance K : $\pm 10\%$, M : $\pm 20\%$

* Isat: For Inductance drop 10% from its value without current.