

SMD Ceramic Multilayer Chip Inductors - HPC Series

FEATURES

- * RoHS compliant
- * Excellent Q factor and SRF characteristics
- * Small size of 1005/1608 is suitable for small portable devices
- * Supports operating frequency up to 6GHz with nominal inductance values from 1.0nH to 470nH.



ORDERING CODE(标志示例)

HPC □□□□ - □□□ □

(1) (2) (3) (4)

(1) HPC 向华料号 Part Number

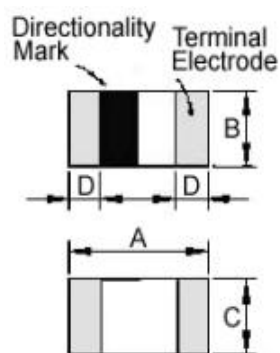
(2) 尺寸 Dimensions

(3) 电感量 Inductance

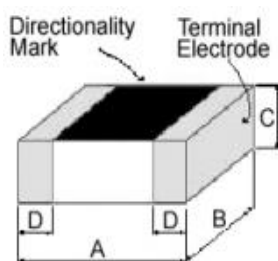
(4) 电感量公差 Inductance Tolerance

Shape and Dimensions

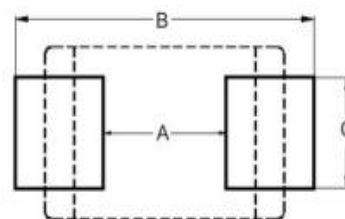
HPC0603 Series



HPC1005 Series
HPC1608 Series



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D
HPC0603	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05
HPC1005	1.0±0.10	0.5±0.10	0.5±0.10	0.25±0.10
HPC1608	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2

Dimensions in mm

TYPE	A	B	C
HPC0603	0.3	0.75~1.05	0.3
HPC1005	0.4	1.2~1.4	0.5
HPC1608	0.7~0.8	1.8~2.0	0.6~0.8



SMD Ceramic Multilayer Chip Inductors - HPC0603 Series

HPC0603 series Electrical Characteristics

Part No.	Inductance (nH)	Tolerance (±%)	Test Freq. (MHz)	Q Min	SRF (MHz)Min	RDC (Ω)Max	Rated Current (mA) Max
HPC0603T-1N0□	1.0	±0.3nH	100	4	>10000	0.11	470
HPC0603T-1N2□	1.2	±0.3nH	100	4	>10000	0.12	450
HPC0603T-1N5□	1.5	±0.3nH	100	4	>10000	0.13	430
HPC0603T-1N8□	1.8	±0.3nH	100	4	>10000	0.16	390
HPC0603T-2N0□	2.0	±0.3nH	100	4	>10000	0.17	380
HPC0603T-2N2□	2.2	±0.3nH	100	4	8800	0.19	360
HPC0603T-2N4□	2.4	±0.3nH	100	4	8300	0.20	350
HPC0603T-2N7□	2.7	±0.3nH	100	4	7700	0.21	340
HPC0603T-3N0□	3.0	±0.3nH	100	4	7200	0.22	330
HPC0603T-3N3□	3.3	±0.3nH	100	4	6700	0.23	320
HPC0603T-3N6□	3.6	±0.3nH	100	4	6400	0.25	310
HPC0603T-3N9□	3.9	±0.3nH	100	4	6000	0.27	300
HPC0603T-4N3□	4.3	±0.3nH	100	4	5700	0.30	280
HPC0603T-4N7□	4.7	±0.3nH	100	4	5300	0.30	280
HPC0603T-5N1□	5.1	±0.3nH	100	4	5000	0.33	270
HPC0603T-5N6□	5.6	±0.3nH	100	4	4600	0.36	260
HPC0603T-6N2□	6.2	±0.3nH	100	4	4200	0.38	250
HPC0603T-6N8□	6.8	5	100	4	3900	0.39	250
HPC0603T-7N5□	7.5	5	100	4	3600	0.41	240
HPC0603T-8N2□	8.2	5	100	4	3400	0.45	230
HPC0603T-9N1□	9.1	5	100	4	3200	0.48	220
HPC0603T-10N□	10	5	100	4	2900	0.51	220
HPC0603T-12N□	12	5	100	4	2700	0.68	190
HPC0603T-15N□	15	5	100	4	2300	0.71	180
HPC0603T-18N□	18	5	100	4	2100	0.81	170
HPC0603T-22N□	22	5	100	4	1800	1.00	150
HPC0603T-27N□	27	5	100	4	1800	1.35	120
HPC0603T-33N□	33	5	100	4	1700	1.47	110
HPC0603T-39N□	39	5	100	4	1500	1.72	100
HPC0603T-47N□	47	5	100	4	1300	1.90	100
HPC0603T-56N□	56	5	100	4	1100	2.27	80
HPC0603T-68N□	68	5	100	4	1100	2.66	80
HPC0603T-82N□	82	5	100	4	1000	3.37	70
HPC0603T-R10□	100	5	100	4	900	3.74	60

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- Rate Current :Applied the current to coils, the temperature rise shall not be more than 30℃
- Residual impedance of short chip : 0.19nH

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 advance notice. Please contact our sales department before ordering.



SMD Ceramic Multilayer Chip Inductors - HPC1005 Series

HPC1005 series Electrical Characteristics

Part No.	Inductance (nH)	Tolerance (±%)	Test Freq. (MHz)	Q Min	SRF (MHz)Typ	RDC (Ω)Max	IDC (mA) Max
HPC1005T-1N0□	1.0	±0.3nH	100	8	10000	0.07	400
HPC1005T-1N1□	1.1	±0.3nH	100	8	10000	0.07	400
HPC1005T-1N2□	1.2	±0.3nH	100	8	10000	0.09	400
HPC1005T-1N3□	1.3	±0.3nH	100	8	9000	0.10	400
HPC1005T-1N5□	1.5	±0.3nH	100	8	9000	0.10	400
HPC1005T-1N6□	1.6	±0.3nH	100	8	8700	0.10	400
HPC1005T-1N8□	1.8	±0.3nH	100	8	8700	0.10	400
HPC1005T-2N0□	2.0	±0.3nH	100	8	8100	0.10	400
HPC1005T-2N2□	2.2	±0.3nH	100	8	8100	0.12	400
HPC1005T-2N4□	2.4	±0.3nH	100	8	7700	0.15	400
HPC1005T-2N7□	2.7	±0.3nH	100	8	7700	0.15	400
HPC1005T-3N0□	3.0	±0.3nH	100	8	6300	0.15	400
HPC1005T-3N3□	3.3	±0.3nH/10	100	8	6300	0.15	400
HPC1005T-3N6□	3.6	±0.3nH/10	100	8	6100	0.15	400
HPC1005T-3N9□	3.9	±0.3nH/10	100	8	6100	0.18	400
HPC1005T-4N3□	4.3	±0.3nH/10	100	8	6000	0.18	400
HPC1005T-4N7□	4.7	±0.3nH/10	100	8	6000	0.18	400
HPC1005T-5N0□	5.0	±0.3nH/10	100	8	5100	0.20	400
HPC1005T-5N1□	5.1	±0.3nH/10	100	8	5300	0.20	400
HPC1005T-5N6□	5.6	±0.3nH/10	100	8	5100	0.20	400
HPC1005T-6N8□	6.8	5 / 10	100	8	4550	0.24	400
HPC1005T-8N0□	8.0	5 / 10	100	8	4100	0.30	300
HPC1005T-8N2□	8.2	5 / 10	100	8	4100	0.24	300
HPC1005T-9N1□	9.1	5 / 10	100	8	3900	0.26	300
HPC1005T-10N□	10	5 / 10	100	8	3900	0.26	300
HPC1005T-12N□	12	5 / 10	100	8	3000	0.40	300
HPC1005T-15N□	15	5 / 10	100	8	2800	0.50	300
HPC1005T-18N□	18	5 / 10	100	8	2500	0.55	300
HPC1005T-22N□	22	5 / 10	100	8	2200	0.70	300
HPC1005T-24N□	24	5 / 10	100	8	2100	0.70	300
HPC1005T-27N□	27	5 / 10	100	8	2000	0.80	300
HPC1005T-33N□	33	5 / 10	100	8	1800	0.90	200
HPC1005T-39N□	39	5 / 10	100	8	1600	1.00	150
HPC1005T-47N□	47	5 / 10	100	8	1400	1.20	150

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- Operating temperature range—55℃～125℃(Including self - temperature rise)
- IDC: Applied the current to coils, the inductance shall be less than 10% initial value

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 advance notice. Please contact our sales department before ordering.



SMD Ceramic Multilayer Chip Inductors - HPC1005 Series

HPC1005 series Electrical Characteristics

Part No.	Inductance (nH)	Tolerance (±%)	Test Freq. (MHz)	Q Min	SRF (MHz)Typ	RDC (Ω)Max	IDC (mA) Max
HPC1005T-56N□	56	5 / 10	100	8	1300	1.30	150
HPC1005T-68N□	68	5 / 10	100	8	1100	1.50	100
HPC1005T-75N□	75	5 / 10	100	8	1080	1.50	100
HPC1005T-82N□	82	5 / 10	100	8	1000	1.60	100
HPC1005T-R10□	100	5 / 10	100	8	900	2.00	100
HPC1005T-R12□	120	5 / 10	100	8	800	2.20	100
HPC1005T-R15□	150	5 / 10	100	8	700	3.50	100
HPC1005T-R18□	180	5 / 10	100	8	600	3.80	100
HPC1005T-R22□	220	5 / 10	100	8	500	4.20	100
HPC1005T-R27□	270	5 / 10	100	8	500	4.80	100

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- IDC: Applied the current to coils, the inductance shall be less than 10% initial value



SMD Ceramic Multilayer Chip Inductors - HPC1005-NP Series

HPC1005-NP series Electrical Characteristics

Part No.	Inductance (nH)	Tolerance (±%)	Test Freq. (MHz)	Q Min	SRF (MHz)Typ	RDC (Ω)Max	Rated Current (mA) Max
HPC1005T-1N0□-NP	1.0	±0.2nH/±0.3nH	100	8	10000	0.07	400
HPC1005T-1N1□-NP	1.1	±0.3nH	100	8	6000	0.09	300
HPC1005T-1N2□-NP	1.2	±0.2nH/±0.3nH	100	8	10000	0.09	400
HPC1005T-1N3□-NP	1.3	±0.3nH	100	8	6000	0.09	300
HPC1005T-1N5□-NP	1.5	±0.3nH	100	8	9000	0.10	400
HPC1005T-1N6□-NP	1.6	±0.3nH	100	8	6000	0.10	400
HPC1005T-1N8□-NP	1.8	±0.3nH	100	8	8700	0.10	400
HPC1005T-2N0□-NP	2.0	±0.3nH	100	8	8100	0.10	400
HPC1005T-2N2□-NP	2.2	±0.3nH	100	8	8100	0.12	400
HPC1005T-2N4□-NP	2.4	±0.3nH	100	8	7700	0.15	400
HPC1005T-2N7□-NP	2.7	±0.3nH	100	8	7700	0.15	400
HPC1005T-3N0□-NP	3.0	±0.3nH	100	8	6300	0.15	400
HPC1005T-3N3□-NP	3.3	±0.3nH	100	8	6300	0.15	400
HPC1005T-3N6□-NP	3.6	±0.3nH	100	8	6100	0.15	400
HPC1005T-3N9□-NP	3.9	±0.3nH	100	8	6100	0.18	400
HPC1005T-4N3□-NP	4.3	±0.3nH	100	8	6000	0.18	400
HPC1005T-4N7□-NP	4.7	±0.3nH	100	8	6000	0.18	400
HPC1005T-5N1□-NP	5.1	±0.3nH	100	8	5300	0.20	400
HPC1005T-5N6□-NP	5.6	±0.3nH	100	8	5100	0.20	400
HPC1005T-6N2□-NP	6.2	±0.3nH/5/10	100	8	4500	0.22	400
HPC1005T-6N8□-NP	6.8	5 / 10	100	8	4550	0.24	400
HPC1005T-7N5□-NP	7.5	5 / 10	100	8	4200	0.24	300
HPC1005T-8N2□-NP	8.2	5 / 10	100	8	4100	0.24	300
HPC1005T-9N1□-NP	9.1	5 / 10	100	8	3900	0.26	300
HPC1005T-10N□-NP	10	5 / 10	100	8	3900	0.26	300
HPC1005T-12N□-NP	12	5 / 10	100	8	3000	0.28	300
HPC1005T-15N□-NP	15	5 / 10	100	8	2500	0.32	300
HPC1005T-18N□-NP	18	5 / 10	100	8	2200	0.36	300
HPC1005T-22N□-NP	22	5 / 10	100	8	1900	0.42	300
HPC1005T-27N□-NP	27	5 / 10	100	8	1700	0.46	300
HPC1005T-33N□-NP	33	5 / 10	100	8	1600	0.58	200
HPC1005T-39N□-NP	39	5 / 10	100	8	1200	0.65	200
HPC1005T-47N□-NP	47	5 / 10	100	8	1000	0.72	200
HPC1005T-56N□-NP	56	5 / 10	100	8	800	0.82	200
HPC1005T-68N□-NP	68	5 / 10	100	8	800	0.92	180
HPC1005T-82N□-NP	82	5 / 10	100	8	700	1.20	150

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- Rate Current: Applied the current to coils, the temperature rise shall not be more than 30℃

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SMD Ceramic Multilayer Chip Inductors - HPC1608 Series

HPC1608 series Electrical Characteristics

Part No.	Inductance (nH)	Tolerance (±%)	Test Freq. (MHz)	Q Min	SRF (MHz)Typ	RDC (Ω)Max	Rated Current (mA) Max
HPC1608T-1N0S	1.0	±0.3nH	100	8	10000	0.10	600
HPC1608T-1N2S	1.2	±0.3nH	100	8	10000	0.10	600
HPC1608T-1N5S	1.5	±0.3nH	100	8	8000	0.10	600
HPC1608T-1N6S	1.6	±0.3nH	100	8	8000	0.10	600
HPC1608T-1N8S	1.8	±0.3nH	100	8	8000	0.10	600
HPC1608T-2N2S	2.2	±0.3nH	100	8	7200	0.10	600
HPC1608T-2N7S	2.7	±0.3nH	100	10	6200	0.10	600
HPC1608T-3N0S	3.0	±0.3nH	100	10	5200	0.12	600
HPC1608T-3N3□	3.3	±0.3nH/10	100	10	5200	0.12	600
HPC1608T-3N6S	3.6	±0.3nH	100	10	5000	0.14	600
HPC1608T-3N9□	3.9	±0.3nH/10	100	10	5000	0.14	600
HPC1608T-4N3□	4.3	±0.3nH/10	100	10	4750	0.16	600
HPC1608T-4N7□	4.7	±0.3nH/10	100	10	4750	0.16	600
HPC1608T-5N1□	5.1	±0.3nH/10	100	10	4100	0.18	600
HPC1608T-5N6□	5.6	±0.3nH/10	100	10	4100	0.18	600
HPC1608T-6N2□	6.2	5 / 10	100	10	3750	0.22	600
HPC1608T-6N8□	6.8	5 / 10	100	10	3750	0.22	600
HPC1608T-7N5□	7.5	5 / 10	100	10	3300	0.24	600
HPC1608T-8N2□	8.2	5 / 10	100	10	3300	0.24	600
HPC1608T-10N□	10	5 / 10	100	12	3000	0.26	600
HPC1608T-12N□	12	5 / 10	100	12	2600	0.28	600
HPC1608T-15N□	15	5 / 10	100	12	2500	0.32	600
HPC1608T-16N□	16	5 / 10	100	12	2400	0.35	600
HPC1608T-18N□	18	5 / 10	100	12	2400	0.35	600
HPC1608T-22N□	22	5 / 10	100	12	2000	0.40	500
HPC1608T-27N□	27	5 / 10	100	12	1900	0.45	500
HPC1608T-33N□	33	5 / 10	100	12	1600	0.55	400
HPC1608T-39N□	39	5 / 10	100	12	1400	0.60	400
HPC1608T-47N□	47	5 / 10	100	12	1300	0.70	400
HPC1608T-56N□	56	5 / 10	100	12	1100	0.75	400

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- IDC: Applied the current to coils, the inductance shall be less than 10% initial value

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SMD Ceramic Multilayer Chip Inductors - HPC1608 Series

HPC1608 series Electrical Characteristics

Part No.	Inductance	Tolerance	Test Freq.	Q	SRF	RDC	Rated Current
	(nH)	(±%)	(MHz)	Min	(MHz)Typ	(Ω)Max	(mA) Max
HPC1608T-62N□	62	5 / 10	100	12	1050	0.85	400
HPC1608T-68N□	68	5 / 10	100	12	1050	0.85	400
HPC1608T-75N□	75	5 / 10	100	12	900	1.00	300
HPC1608T-82N□	82	5 / 10	100	12	900	1.00	300
HPC1608T-R10□	100	5 / 10	100	12	770	1.20	300
HPC1608T-R12□	120	5 / 10	50	8	650	1.30	300
HPC1608T-R15□	150	5 / 10	50	8	550	1.70	250
HPC1608T-R18□	180	5 / 10	50	8	520	1.90	250
HPC1608T-R22□	220	5 / 10	50	8	500	2.00	250
HPC1608T-R27□	270	5 / 10	50	8	470	2.20	150
HPC1608T-R33□	330	5 / 10	50	8	320	2.80	100
HPC1608T-R39□	390	5 / 10	50	8	300	3.00	100

Note: When ordering, please specify tolerance code. Tolerance : S=±0.3nH , J=±5% , K=±10%

- Operating temperature range—55℃~125℃(Including self - temperature rise)
- IDC: Applied the current to coils, the inductance shall be less than 10% initial value

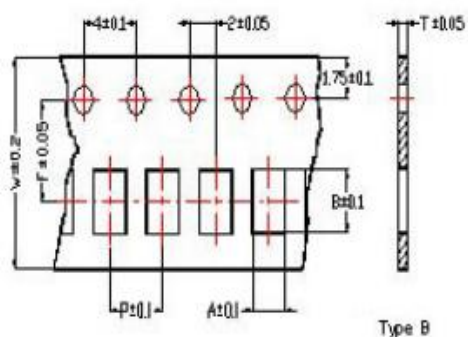


SMD Ceramic Multilayer Chip Inductors - HPC Series

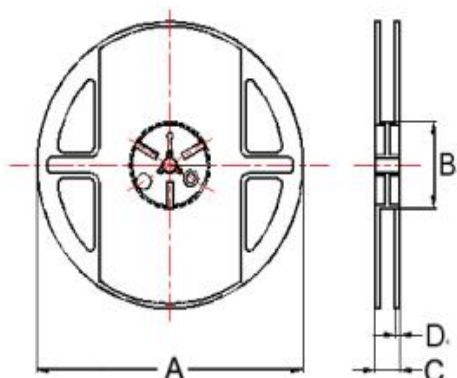
Packaging Specifications

Tape Dimensions

Figure A



Reel Dimensions



Tape Material

Figure A

Carrier Tape: Polycarbonate (Tape A)
Carrier Tape: Paper (Tape B)
Cover Tape: Polystyrene

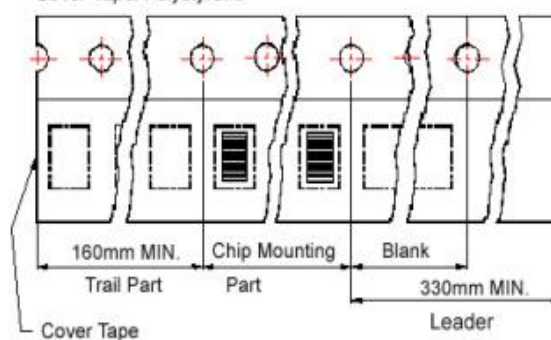
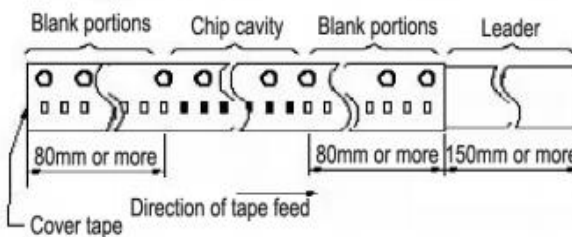


Figure B

Carrier tape : Paper
Cover tape : Polyethylene



Dimensions in mm

TYPE	Tape Dimensions							Tape Material	Reel Dimensions				Quantity PCS/REEL
	A	B	T	W	P	F	Tape		A	B	C	D	
HPF160808	0.37	0.67	0.42	8.0	2.0	3.5	B	B	180	60	13	1.5	15000
HPF201209	0.62	1.12	0.60	8.0	2.0	3.5	B	A	178	60	12	1.5	10000
HPF201212	1.00	1.80	0.95	8.0	4.0	3.5	B	A	178	60	12	1.5	4000