



SMD Wire Wound Ceramic Chip Inductors - HCW Series

FEATURES

- * RoHS Compliant
- * Ceramic body and wire wound construction provide high SRFs
- * Exceptional Q values even at high frequencies
- * Highest possible SRFs as well as excellent Q values
- * The non-magnetic coil form assures utmost thermal stability, predictability and batch consistency
- * HCW series is standard for RF designers



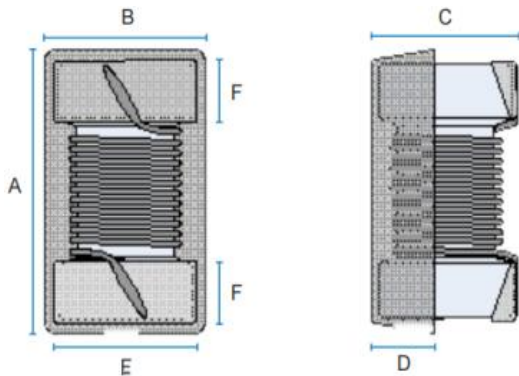
ORDERING CODE(标志示例)

HCW □□□□ - □□□ □

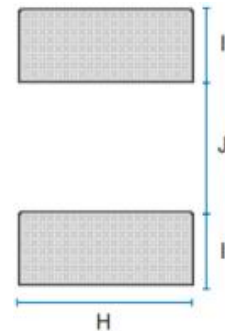
(1) (2) (3) (4)

- (1) HCW 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



Recommended Pattern



Dimensions in mm

TYPE	A Max	B Max	C Max	D Typ.	E Typ.	F Typ.	H Typ.	I Typ.	J Typ.
HCW0402	1.19	0.70	0.66	0.25	0.51	0.23	0.66	0.36	0.46
HCW0603	1.80	1.12	0.95	0.51	0.76	0.33	1.02	0.64	0.64
HCW0805	2.29	1.73	1.52	0.71	1.27	0.51	1.78	1.02	0.76
HCW1008	2.92	2.70	2.23	1.16	2.03	0.51	2.54	1.02	1.27
HCW1210	3.50	2.90	2.25	1.20	2.03	0.51	2.54	1.02	1.78
HCW1812	4.95	3.85	3.43	1.78	2.54	0.64	3.05	1.14	3.00



SMD Wire Wound Ceramic Chip Inductors - HCW0402 Series

HCW0402 series Electrical Characteristics

Part No.	Inductance (nH)	Test Freq. (MHz)	Q Min	SRF (GHz) Min	RDC (Ω)Max	Irms (mA) Max	Tolerance (±%)
HCW0402-1N0□	1.0	250	10	12.9	0.045	1360	S,D,K,M
HCW0402-1N3□	1.3	250	8	12.9	0.150	900	S,D,K,M
HCW0402-1N5□	1.5	250	8	12.9	0.150	800	S,D,K,M
HCW0402-1N8□	1.8	250	20	12	0.070	1040	S,D,K,M
HCW0402-1N9□	1.9	250	20	11.3	0.070	1040	S,D,K,M
HCW0402-2N0□	2.0	250	23	11.1	0.090	1040	J,K,M
HCW0402-2N2□	2.2	250	22	10.8	0.090	960	J,K,M
HCW0402-2N4□	2.4	250	22	10.5	0.090	790	J,K,M
HCW0402-2N6□	2.6	250	12	10.4	0.170	400	J,K,M
HCW0402-2N7□	2.7	250	12	10.4	0.170	400	J,K,M
HCW0402-2N9□	2.9	250	8	8	0.250	400	J,K,M
HCW0402-3N0□	3.0	250	24	7	0.076	840	J,K,M
HCW0402-3N3□	3.3	250	24	7	0.076	840	J,K,M
HCW0402-3N6□	3.6	250	24	6.8	0.076	840	J,K,M
HCW0402-3N9□	3.9	250	24	6	0.076	840	J,K,M
HCW0402-4N1□	4.1	250	22	6	0.091	700	J,K,M
HCW0402-4N3□	4.3	250	22	6	0.091	700	J,K,M
HCW0402-4N7□	4.7	250	20	4.77	0.130	640	J,K,M
HCW0402-5N1□	5.1	250	23	4.8	0.110	800	J,K,M
HCW0402-5N6□	5.6	250	25	4.8	0.110	760	J,K,M
HCW0402-5N8□	5.8	250	25	4.8	0.110	760	J,K,M
HCW0402-6N2□	6.2	250	25	4.8	0.110	760	J,K,M
HCW0402-6N8□	6.8	250	24	4.8	0.120	680	J,K,M
HCW0402-7N2□	7.2	250	25	4.8	0.120	680	J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S=±0.3nH , D=±0.5nH , G=±2% , J=±5% , K=±10% , M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Rating DC current: Temperature rise (ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

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 Wire Wound Ceramic Chip Inductors - HCW0402 Series

HCW0402 series Electrical Characteristics

Part No.	Inductance	Test Freq.	Q	SRF	RDC	Irms	Tolerance
	(nH)	(MHz)	Min	(GHz) Min	(Ω)Max	(mA) Max	($\pm\%$)
HCW0402-7N3□	7.3	250	25	4.8	0.120	680	J,K,M
HCW0402-7N5□	7.5	250	25	4.8	0.150	680	J,K,M
HCW0402-8N2□	8.2	250	25	4.4	0.150	680	J,K,M
HCW0402-8N7□	8.7	250	25	4.1	0.200	480	J,K,M
HCW0402-9N0□	9.0	250	25	4.16	0.150	680	J,K,M
HCW0402-9N1□	9.1	250	25	4.16	0.150	680	J,K,M
HCW0402-9N5□	9.5	250	24	4.00	0.200	480	J,K,M
HCW0402-10N□	10.0	250	24	3.90	0.200	480	J,K,M
HCW0402-11N□	11.0	250	26	3.68	0.120	640	J,K,M
HCW0402-12N□	12.0	250	26	3.60	0.120	640	J,K,M
HCW0402-13N□	13.0	250	24	3.45	0.210	440	J,K,M
HCW0402-15N□	15.0	250	26	3.28	0.170	560	J,K,M
HCW0402-16N□	16.0	250	25	3.10	0.250	560	J,K,M
HCW0402-18N□	18.0	250	25	3.10	0.230	420	J,K,M
HCW0402-19N□	19.0	250	26	3.04	0.240	480	J,K,M
HCW0402-20N□	20.0	250	26	3.00	0.250	420	J,K,M
HCW0402-22N□	22.0	250	25	2.80	0.300	400	J,K,M
HCW0402-23N□	23.0	250	25	2.72	0.300	400	J,K,M
HCW0402-24N□	24.0	250	25	2.70	0.350	400	J,K,M
HCW0402-27N□	27.0	250	25	2.48	0.300	400	J,K,M
HCW0402-30N□	30.0	250	25	2.35	0.400	400	J,K,M
HCW0402-33N□	33.0	250	24	2.35	0.400	400	J,K,M
HCW0402-36N□	36.0	250	25	2.32	0.500	320	J,K,M
HCW0402-39N□	39.0	250	25	2.10	0.550	200	J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S= ± 0.3 nH , D= ± 0.5 nH , G= $\pm 2\%$, J= $\pm 5\%$, K= $\pm 10\%$, M= $\pm 20\%$

- Operating temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self - temperature rise)
- Rating DC current: Temperature rise (ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at $<30^{\circ}\text{C}/65\%$ relative humidity)

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SMD Wire Wound Ceramic Chip Inductors - HCW0402 Series

HCW0402 series Electrical Characteristics

Part No.	Inductance	Test Freq.	Q	SRF	RDC	Irms	Tolerance
	(nH)	(MHz)	Min	(GHz) Min	(Ω)Max	(mA) Max	(\pm %)
HCW0402-40N□	40.0	250	25	2.24	0.650	320	J,K,M
HCW0402-43N□	43.0	250	25	2.03	0.810	100	J,K,M
HCW0402-47N□	47.0	250	25	2.10	0.830	150	J,K,M
HCW0402-51N□	51.0	250	25	1.75	0.920	100	J,K,M
HCW0402-56N□	56.0	250	25	1.76	0.970	100	J,K,M
HCW0402-62N□	62.0	250	25	1.62	1.400	100	J,K,M
HCW0402-68N□	68.0	250	25	1.62	1.500	100	J,K,M
HCW0402-72N□	72.0	250	25	1.26	1.700	50	J,K,M
HCW0402-75N□	75.0	250	25	1.26	1.750	50	J,K,M
HCW0402-77N□	77.0	250	25	1.26	1.750	50	J,K,M
HCW0402-82N□	82.0	250	25	1.26	1.800	50	J,K,M
HCW0402-91N□	91.0	250	25	1.16	2.200	30	J,K,M
HCW0402-R10□	100.0	250	24	1.16	2.500	30	G,J,K,M
HCW0402-R11□	110	250	24	1.15	2.600	30	G,J,K,M
HCW0402-R12□	120	250	24	1.10	2.200	30	G,J,K,M
HCW0402-R15□	150	250	10	1.00	4.000	20	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S= \pm 0.3nH , D= \pm 0.5nH , G= \pm 2% , J= \pm 5% , K= \pm 10% , M= \pm 20%

- Operating temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self - temperature rise)
- Rating DC current: Temperature rise (ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at $<30^{\circ}\text{C}/65\%$ relative humidity)



SMD Wire Wound Ceramic Chip Inductors - HCW0603 Series

HCW0603 series Electrical Characteristics

Part No.	Inductance	Test Freq.	Q	SRF	RDC	Irms	Tolerance
	(nH)	(MHz)	Min	(MHz)Min	(Ω)Max	(mA) Max	($\pm\%$)
HCW0603-1N5□	1.5	250	24	12500	0.03	700	S,K,M
HCW0603-1N6□	1.6	250	24	12500	0.03	700	S,K,M
HCW0603-1N8□	1.8	250	16	12500	0.045	700	S,J,K,M
HCW0603-2N0□	2.0	250	12	12500	0.25	700	S,J,K,M
HCW0603-2N2□	2.2	250	12	12500	0.25	700	S,J,K,M
HCW0603-2N7□	2.7	250	22	5900	0.045	700	S,J,K,M
HCW0603-3N3□	3.3	250	22	5900	0.045	700	S,J,K,M
HCW0603-3N6□	3.6	250	22	5900	0.063	700	S,J,K,M
HCW0603-3N9□	3.9	250	22	6900	0.08	700	S,J,K,M
HCW0603-4N3□	4.3	250	22	5900	0.063	700	S,J,K,M
HCW0603-4N7□	4.7	250	20	5800	0.116	700	S,J,K,M
HCW0603-5N1□	5.1	250	20	5700	0.14	700	J,K,M
HCW0603-5N6□	5.6	250	26	4760	0.075	700	G,J,K,M
HCW0603-6N2□	6.2	250	20	5700	0.14	700	G,J,K,M
HCW0603-6N3□	6.3	250	20	5700	0.14	700	G,J,K,M
HCW0603-6N8□	6.8	250	27	5800	0.11	700	G,J,K,M
HCW0603-7N5□	7.5	250	28	4800	0.106	700	G,J,K,M
HCW0603-8N0□	8.0	250	28	4700	0.109	700	G,J,K,M
HCW0603-8N2□	8.2	250	30	4200	0.115	700	G,J,K,M
HCW0603-8N7□	8.7	250	28	4600	0.109	700	G,J,K,M
HCW0603-9N1□	9.1	250	28	5400	0.125	700	G,J,K,M
HCW0603-9N5□	9.5	250	28	5400	0.125	700	G,J,K,M
HCW0603-10N□	10	250	31	4800	0.13	700	G,J,K,M
HCW0603-11N□	11	250	30	4000	0.13	700	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S= ± 0.3 nH , D= ± 0.5 nH , G= $\pm 2\%$, J= $\pm 5\%$, K= $\pm 10\%$, M= $\pm 20\%$

- Operating temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self - temperature rise)
- Rating DC current: Temperature rise(ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at $<30^{\circ}\text{C}/65\%$ relative humidity)

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SMD Wire Wound Ceramic Chip Inductors - HCW0603 Series

HCW0603 series Electrical Characteristics

Part No.	Inductance	Test Freq.	Q	SRF	RDC	Irms	Tolerance
	(nH)	(MHz)	Min	(MHz)Min	(Ω)Max	(mA) Max	(\pm %)
HCW0603-12N□	12.0	250	35	4000	0.13	700	G,J,K,M
HCW0603-13N□	13	250	35	4000	0.13	700	G,J,K,M
HCW0603-15N□	15	250	35	4000	0.17	700	G,J,K,M
HCW0603-16N□	16.0	250	34	3300	0.17	700	G,J,K,M
HCW0603-18N□	18	250	35	3100	0.17	700	G,J,K,M
HCW0603-20N□	20.0	250	36	3000	0.18	700	G,J,K,M
HCW0603-22N□	22	250	38	3000	0.19	700	G,J,K,M
HCW0603-23N□	23	250	38	3000	0.19	700	G,J,K,M
HCW0603-24N□	24	250	36	2650	0.135	700	G,J,K,M
HCW0603-27N□	27	250	40	2800	0.22	600	G,J,K,M
HCW0603-30N□	30	250	37	2250	0.22	600	G,J,K,M
HCW0603-33N□	33.0	250	40	2300	0.22	600	G,J,K,M
HCW0603-36N□	36	250	37	2080	0.25	600	G,J,K,M
HCW0603-39N□	39	250	40	2200	0.25	600	G,J,K,M
HCW0603-43N□	43	250	38	2000	0.28	600	G,J,K,M
HCW0603-47N□	47	200	38	2000	0.28	600	G,J,K,M
HCW0603-51N□	51	200	35	1900	0.27	600	G,J,K,M
HCW0603-56N□	56.0	200	38	1900	0.31	600	G,J,K,M
HCW0603-60N□	60	200	37	1800	0.33	600	G,J,K,M
HCW0603-62N□	62	200	37	1800	0.33	600	G,J,K,M
HCW0603-68N□	68	200	37	1700	0.34	600	G,J,K,M
HCW0603-72N□	72	150	34	1700	0.49	400	G,J,K,M
HCW0603-75N□	75	150	28	1700	0.52	400	G,J,K,M
HCW0603-82N□	82	150	34	1700	0.54	400	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S= \pm 0.3nH , D= \pm 0.5nH , G= \pm 2% , J= \pm 5% , K= \pm 10% , M= \pm 20%

- Operating temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self - temperature rise)
- Rating DC current: Temperature rise (ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at $<30^{\circ}\text{C}/65\%$ relative humidity)

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SMD Wire Wound Ceramic Chip Inductors - HCW0603 Series

HCW0603 series Electrical Characteristics

Part No.	Inductance	Test Freq.	Q	SRF	RDC	Irms	Tolerance
	(nH)	(MHz)	Min	(MHz)Min	(Ω)Max	(mA) Max	(\pm %)
HCW0603-85N□	85	150	34	1700	0.58	400	G,J,K,M
HCW0603-91N□	91	150	28	1600	0.58	400	G,J,K,M
HCW0603-R10□	100	150	34	1400	0.58	400	G,J,K,M
HCW0603-R11□	110	150	32	1350	0.61	300	G,J,K,M
HCW0603-R12□	120	150	32	1300	0.65	300	G,J,K,M
HCW0603-R13□	130	150	32	1150	0.92	290	G,J,K,M
HCW0603-R135□	135	150	32	990	0.92	290	G,J,K,M
HCW0603-R15□	150	150	28	990	0.92	280	G,J,K,M
HCW0603-R16□	160	150	28	990	1.25	280	G,J,K,M
HCW0603-R18□	180	100	25	990	1.25	240	G,J,K,M
HCW0603-R20□	200	100	25	900	1.98	200	G,J,K,M
HCW0603-R215□	215	100	25	900	2.1	200	G,J,K,M
HCW0603-R22□	220	100	25	900	2.1	200	G,J,K,M
HCW0603-R24□	240	100	25	900	2.2	200	G,J,K,M
HCW0603-R25□	250	100	25	882	2.55	120	G,J,K,M
HCW0603-R27□	270	100	26	830	2.16	170	G,J,K,M
HCW0603-R29□	290	100	25	800	3.2	100	G,J,K,M
HCW0603-R30□	300	100	25	790	2.5	100	G,J,K,M
HCW0603-R33□	330	100	25	790	3.89	100	G,J,K,M
HCW0603-R39□	390	100	25	780	4.35	100	G,J,K,M
HCW0603-R47□	470	100	25	700	4.5	100	G,J,K,M
HCW0603-R56□	560	100	23	460	5	90	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S=±0.3nH , D=±0.5nH , G=±2% , J=±5% , K=±10% , M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Rating DC current: Temperature rise (ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

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SMD Wire Wound Ceramic Chip Inductors - HCW0805 Series

HCW0805 series Electrical Characteristics

Part No.	Inductance (nH)	Test Freq. (MHz)	Q Min	SRF (MHz)Min	RDC (Ω)Max	I _{rms} (mA) Max	Tolerance (±%)
HCW0805-2N2□	2.2	250	50 @1GHz	7900	0.06	800	S,J,K,M
HCW0805-2N7□	2.7	250	50 @1GHz	7900	0.06	800	S,J,K,M
HCW0805-3N0□	3	250	40 @1.5GHz	7900	0.06	800	S,J,K,M
HCW0805-3N3□	3.3	250	40 @1.5GHz	7900	0.08	600	S,J,K,M
HCW0805-3N6□	3.6	250	20 @1GHz	7900	0.2	200	S,J,K,M
HCW0805-3N9□	3.9	250	20 @1GHz	7900	0.2	150	S,J,K,M
HCW0805-4N7□	4.7	250	35 @1GHz	6200	0.08	600	S,J,K,M
HCW0805-5N1□	5.1	250	50 @1GHz	6200	0.08	600	S,J,K,M
HCW0805-5N6□	5.6	250	65 @1GHz	5900	0.08	600	S,J,K,M
HCW0805-6N2□	6.2	250	65 @1GHz	5900	0.08	600	J,K,M
HCW0805-6N8□	6.8	250	50 @1GHz	5600	0.11	600	J,K,M
HCW0805-7N5□	7.5	250	50 @1GHz	4800	0.14	600	J,K,M
HCW0805-8N2□	8.2	250	50 @1GHz	4400	0.12	600	J,K,M
HCW0805-9N1□	9.1	250	60 @500MHz	4300	0.1	600	J,K,M
HCW0805-10N□	10	250	60 @500MHz	4300	0.1	600	J,K,M
HCW0805-12N□	12	250	50 @500MHz	4000	0.15	600	J,K,M
HCW0805-15N□	15	250	50 @500MHz	3200	0.17	600	J,K,M
HCW0805-16N□	16	250	50 @500MHz	3200	0.17	600	J,K,M
HCW0805-18N□	18	250	50 @500MHz	3100	0.2	600	J,K,M
HCW0805-20N□	20	250	55 @500MHz	2600	0.22	500	J,K,M
HCW0805-22N□	22	250	55 @500MHz	2600	0.22	500	J,K,M
HCW0805-23N□	23	250	50 @500MHz	2400	0.22	500	J,K,M
HCW0805-24N□	24	250	50 @500MHz	2400	0.22	500	J,K,M
HCW0805-25N□	25	250	50 @500MHz	2450	0.22	500	J,K,M
HCW0805-27N□	27	250	55 @500MHz	2580	0.25	500	J,K,M
HCW0805-30N□	30	250	55 @500MHz	2400	0.25	500	J,K,M
HCW0805-33N□	33	250	60 @500MHz	2150	0.27	500	J,K,M
HCW0805-36N□	36	250	55 @500MHz	1900	0.27	500	J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S=±0.3nH , D=±0.5nH , G=±2% , J=±5% , K=±10% , M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Rating DC current: Temperature rise(ΔT) is 40°C approximately at I_{rms}
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

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 Wire Wound Ceramic Chip Inductors - HCW0805 Series

HCW0805 series Electrical Characteristics

Part No.	Inductance (nH)	Test Freq. (MHz)	Q Min	SRF (MHz)Min	RDC (Ω)Max	Irms (mA) Max	Tolerance ($\pm\%$)
HCW0805-39N□	39	250	60 @500MHz	1850	0.29	500	J,K,M
HCW0805-43N□	43	200	60 @500MHz	1800	0.34	500	J,K,M
HCW0805-47N□	47	200	60 @500MHz	1700	0.31	500	J,K,M
HCW0805-50N□	50	200	60 @500MHz	1650	0.34	500	J,K,M
HCW0805-56N□	56	200	60 @500MHz	1600	0.34	500	J,K,M
HCW0805-62N□	62	200	60 @500MHz	1450	0.36	500	J,K,M
HCW0805-64N□	64	200	60 @500MHz	1500	0.38	500	J,K,M
HCW0805-68N□	68	200	60 @500MHz	1500	0.38	500	J,K,M
HCW0805-72N□	72	150	60 @500MHz	1400	0.38	500	J,K,M
HCW0805-75N□	75	150	60 @500MHz	1400	0.4	450	J,K,M
HCW0805-78N□	78	150	60 @500MHz	1400	0.4	450	J,K,M
HCW0805-82N□	82	150	65 @500MHz	1330	0.42	400	J,K,M
HCW0805-91N□	91	150	65 @500MHz	1330	0.48	400	J,K,M
HCW0805-R10□	100	150	65 @500MHz	1250	0.46	400	G,J,K,M
HCW0805-R11□	110	150	50 @500MHz	1100	0.48	400	G,J,K,M
HCW0805-R12□	120	150	50 @500MHz	1100	0.51	400	G,J,K,M
HCW0805-R13□	130	100	50 @500MHz	920	0.56	400	G,J,K,M
HCW0805-R14□	140	100	50 @500MHz	920	0.56	400	G,J,K,M
HCW0805-R15□	150	100	50 @500MHz	920	0.56	400	G,J,K,M
HCW0805-R16□	160	100	50 @500MHz	920	0.6	400	G,J,K,M
HCW0805-R18□	180	100	50 @500MHz	920	0.64	400	G,J,K,M
HCW0805-R20□	200	100	50 @500MHz	860	0.68	400	G,J,K,M
HCW0805-R21□	210	100	50 @500MHz	820	0.7	400	G,J,K,M
HCW0805-R22□	220	100	50 @500MHz	820	0.7	400	G,J,K,M
HCW0805-R24□	240	100	44 @500MHz	770	1.0	350	G,J,K,M
HCW0805-R25□	250	100	45 @500MHz	750	1.2	350	G,J,K,M
HCW0805-R27□	270	100	48 @500MHz	730	1.0	350	G,J,K,M
HCW0805-R28□	280	100	48 @500MHz	550	1.35	350	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S= ± 0.3 nH , D= ± 0.5 nH , G= $\pm 2\%$, J= $\pm 5\%$, K= $\pm 10\%$, M= $\pm 20\%$

- Operating temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self - temperature rise)
- Rating DC current: Temperature rise(ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at $<30^{\circ}\text{C}/65\%$ relative humidity)

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 Wire Wound Ceramic Chip Inductors - HCW0805 Series

HCW0805 series Electrical Characteristics

Part No.	Inductance	Test Freq.	Q	SRF	RDC	Irms	Tolerance
	(nH)	(MHz)	Min	(MHz)Min	(Ω)Max	(mA) Max	($\pm\%$)
HCW0805-R29□	290	150	48 @250MHz	450	1.4	310	G,J,K,M
HCW0805-R30□	300	150	48 @250MHz	450	1.4	310	G,J,K,M
HCW0805-R33□	330	100	48 @250MHz	650	1.4	310	G,J,K,M
HCW0805-R36□	360	100	48 @250MHz	630	1.45	300	G,J,K,M
HCW0805-R39□	390	100	48 @250MHz	600	1.5	290	G,J,K,M
HCW0805-R42□	420	50	33 @100MHz	425	1.7	250	G,J,K,M
HCW0805-R43□	430	50	33 @100MHz	425	1.7	250	G,J,K,M
HCW0805-R47□	470	50	33 @100MHz	375	1.76	250	G,J,K,M
HCW0805-R56□	560	25	23 @50MHz	330	1.9	230	G,J,K,M
HCW0805-R62□	620	25	23 @50MHz	320	2.2	210	G,J,K,M
HCW0805-R68□	680	25	23 @50MHz	310	2.2	190	G,J,K,M
HCW0805-R75□	750	25	23 @50MHz	310	2.3	180	G,J,K,M
HCW0805-R82□	820	25	23 @50MHz	310	2.35	180	G,J,K,M
HCW0805-R88□	880	25	23 @50MHz	310	2.35	180	G,J,K,M
HCW0805-R91□	910	25	22 @50MHz	250	2.45	170	G,J,K,M
HCW0805-1R0□	1000	25	20 @50MHz	220	2.5	170	G,J,K,M
HCW0805-1R2□	1200	25	20 @25MHz	180	2.9	150	G,J,K,M
HCW0805-1R5□	1500	25	20 @25MHz	160	3.3	150	G,J,K,M
HCW0805-1R6□	1600	25	20 @25MHz	140	3.4	150	G,J,K,M
HCW0805-1R8□	1800	25	20 @25MHz	130	3.5	120	G,J,K,M
HCW0805-2R2□	2200	25	20 @25MHz	100	4.5	120	G,J,K,M
HCW0805-2R7□	2700	25	18 @25MHz	80	4.8	100	G,J,K,M
HCW0805-3R3□	3300	25	18 @25MHz	50	6.8	50	G,J,K,M
HCW0805-4R7□	4700	25	18 @25MHz	40	7	30	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S=±0.3nH , D=±0.5nH , G=±2% , J=±5% , K=±10% , M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Rating DC current: Temperature rise(ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

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 Wire Wound Ceramic Chip Inductors - HCW1008 Series

HCW1008 series Electrical Characteristics

Part No.	Inductance	Test Freq.	Q	SRF	RDC	Irms	Tolerance
	(nH)	(MHz)	Min	(MHz)Min	(Ω)Max	(mA) Max	($\pm\%$)
HCW1008-22N□	22	50	55 @350MHz	2400	0.12	1000	J,K,M
HCW1008-39N□	39	50	60 @350MHz	1500	0.15	1000	J,K,M
HCW1008-47N□	47	50	65 @350MHz	1500	0.16	1000	J,K,M
HCW1008-56N□	56	50	65 @350MHz	1300	0.18	1000	J,K,M
HCW1008-68N□	68	50	65 @350MHz	1300	0.20	1000	J,K,M
HCW1008-91N□	91	50	60 @350MHz	1000	0.56	650	J,K,M
HCW1008-R10□	100	25	60 @350MHz	1000	0.56	650	G,J,K,M
HCW1008-R12□	120	25	60 @350MHz	950	0.63	650	G,J,K,M
HCW1008-R15□	150	25	45 @100MHz	850	0.70	580	G,J,K,M
HCW1008-R18□	180	25	45 @100MHz	750	0.77	620	G,J,K,M
HCW1008-R20□	200	25	45 @100MHz	700	0.84	500	G,J,K,M
HCW1008-R22□	220	25	45 @100MHz	700	0.84	500	G,J,K,M
HCW1008-R27□	270	25	45 @100MHz	600	0.91	500	G,J,K,M
HCW1008-R33□	330	25	45 @100MHz	570	1.05	450	G,J,K,M
HCW1008-R39□	390	25	45 @100MHz	500	1.12	470	G,J,K,M
HCW1008-R47□	470	25	45 @100MHz	450	1.19	470	G,J,K,M
HCW1008-R56□	560	25	45 @100MHz	415	1.33	400	G,J,K,M
HCW1008-R68□	680	25	45 @100MHz	375	1.47	400	G,J,K,M
HCW1008-R82□	820	25	45 @100MHz	350	1.61	400	G,J,K,M
HCW1008-R91□	910	25	35 @50MHz	320	1.68	380	G,J,K,M
HCW1008-1R0□	1000	25	35 @50MHz	290	1.80	370	G,J,K,M
HCW1008-1R2□	1200	7.9	35 @50MHz	250	2.00	310	G,J,K,M
HCW1008-1R5□	1500	7.9	28 @50MHz	200	2.30	330	G,J,K,M
HCW1008-1R8□	1800	7.9	28 @50MHz	160	2.60	300	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S=±0.3nH , D=±0.5nH , G=±2% , J=±5% , K=±10% , M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Rating DC current: Temperature rise(ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

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 Wire Wound Ceramic Chip Inductors - HCW1210 Series

HCW1210 series Electrical Characteristics

Part No.	Inductance (nH)	Test Freq. (MHz)	Q Min	SRF (MHz)Min	RDC (Ω)Max	I _{rms} (mA) Max	Tolerance (\pm %)
HCW1210-10N□	10	100	40 @300MHz	4000	0.08	1000	J,K,M
HCW1210-12N□	12	100	40 @300MHz	3200	0.08	1000	J,K,M
HCW1210-15N□	15	100	40 @300MHz	3200	0.20	1000	J,K,M
HCW1210-18N□	18	100	50 @300MHz	2800	0.10	1000	J,K,M
HCW1210-22N□	22	100	50 @300MHz	2200	0.10	1000	J,K,M
HCW1210-27N□	27	100	50 @300MHz	1800	0.11	1000	J,K,M
HCW1210-33N□	33	100	55 @300MHz	1800	0.11	1000	J,K,M
HCW1210-39N□	39	100	55 @300MHz	1500	0.12	1000	J,K,M
HCW1210-43N□	43	100	55 @300MHz	1500	0.12	1000	J,K,M
HCW1210-47N□	47	100	55 @300MHz	1500	0.13	1000	J,K,M
HCW1210-56N□	56	100	55 @300MHz	1450	0.14	1000	J,K,M
HCW1210-68N□	68	100	55 @300MHz	1200	0.15	900	J,K,M
HCW1210-82N□	82	100	55 @300MHz	1000	0.20	900	J,K,M
HCW1210-91N□	91	100	60 @300MHz	1100	0.20	1000	J,K,M
HCW1210-R10□	100	100	55 @300MHz	900	0.20	850	G,J,K,M
HCW1210-R12□	120	100	60 @300MHz	800	0.25	800	G,J,K,M
HCW1210-R15□	150	100	60 @300MHz	700	0.30	750	G,J,K,M
HCW1210-R18□	180	50	60 @300MHz	650	0.30	700	G,J,K,M
HCW1210-R22□	220	50	60 @300MHz	650	0.40	770	G,J,K,M
HCW1210-R24□	240	50	40 @300MHz	580	0.40	630	G,J,K,M
HCW1210-R27□	270	50	40 @300MHz	580	0.40	630	G,J,K,M
HCW1210-R33□	330	50	45 @150MHz	580	0.58	590	G,J,K,M
HCW1210-R36□	360	50	45 @150MHz	510	0.58	530	G,J,K,M
HCW1210-R39□	390	50	45 @150MHz	510	0.58	530	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S=±0.3nH, D=±0.5nH, G=±2%, J=±5%, K=±10%, M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Rating DC current: Temperature rise (ΔT) is 40°C approximately at I_{rms}
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

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 Wire Wound Ceramic Chip Inductors - HCW1210 Series

HCW1210 series Electrical Characteristics

Part No.	Inductance	Test Freq.	Q	SRF	RDC	I _{rms}	Tolerance
	(nH)	(MHz)	Min	(MHz)Min	(Ω)Max	(mA) Max	(±%)
HCW1210-R47□	470	50	45 @150MHz	480	1.00	490	G,J,K,M
HCW1210-R56□	560	25	45 @150MHz	420	1.10	460	G,J,K,M
HCW1210-R68□	680	25	45 @150MHz	400	1.20	430	G,J,K,M
HCW1210-R82□	820	25	45 @150MHz	370	2.00	400	G,J,K,M
HCW1210-1R0□	1000	25	45 @150MHz	340	1.85	320	G,J,K,M
HCW1210-1R2□	1200	25	45 @150MHz	220	2.30	300	G,J,K,M
HCW1210-1R5□	1500	7.9	20 @50MHz	160	2.70	310	G,J,K,M
HCW1210-1R8□	1800	7.9	30 @50MHz	160	3.50	310	G,J,K,M
HCW1210-2R2□	2200	7.9	25 @50MHz	130	2.41	310	G,J,K,M
HCW1210-2R7□	2700	7.9	25 @50MHz	110	3.50	300	G,J,K,M
HCW1210-3R0□	3000	7.9	20 @50MHz	110	3.50	300	G,J,K,M
HCW1210-3R3□	3300	7.9	20 @50MHz	60	3.60	290	G,J,K,M
HCW1210-3R9□	3900	7.9	20 @50MHz	60	4.00	290	G,J,K,M
HCW1210-4R7□	4700	7.9	20 @50MHz	60	5.00	280	G,J,K,M
HCW1210-5R2□	5200	7.9	15 @25MHz	50	6.00	250	G,J,K,M
HCW1210-5R6□	5600	7.9	15 @25MHz	50	6.00	250	G,J,K,M
HCW1210-6R8□	6800	7.9	15 @7.9MHz	40	9.00	230	G,J,K,M
HCW1210-7R5□	7500	7.9	20 @7.9MHz	50	9.50	170	G,J,K,M
HCW1210-8R2□	8200	7.9	20 @7.9MHz	50	9.50	170	G,J,K,M
HCW1210-8R6□	8600	7.9	15 @7.9MHz	40	9.00	200	G,J,K,M
HCW1210-100□	10000	7.9	15 @7.9MHz	30	10.00	150	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S=±0.3nH , D=±0.5nH , G=±2% , J=±5% , K=±10% , M=±20%

- Operating temperature range -40°C ~ +85°C (Including self - temperature rise)
- Rating DC current: Temperature rise(ΔT) is 40°C approximately at I_{rms}
- Moisture sensitivity level (MSL) 2 (1 year floor life at <30°C/65% relative humidity)

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 Wire Wound Ceramic Chip Inductors - HCW1812 Series

HCW1812 series Electrical Characteristics

Part No.	Inductance	Test Freq.	Q	SRF	RDC	Irms	Tolerance
	(μ H)	(MHz)	Min	(MHz)Min	(Ω)Max	(mA) Max	(\pm %)
HCW1812-R10□	0.10	7.9	60 @50MHz	400	0.60	480	J,KM
HCW1812-R12□	0.12	25	50 @25MHz	900	0.10	480	J,KM
HCW1812-R15□	0.15	25	50 @25MHz	700	0.12	480	J,KM
HCW1812-R18□	0.18	25	50 @25MHz	700	0.13	480	J,KM
HCW1812-R22□	0.22	25	50 @25MHz	500	0.14	480	J,KM
HCW1812-R27□	0.27	25	50 @25MHz	500	0.15	480	J,KM
HCW1812-R33□	0.33	7.9	60 @50MHz	400	0.70	480	J,KM
HCW1812-R39□	0.39	7.9	60 @50MHz	400	0.80	480	J,KM
HCW1812-R75□	0.75	7.9	60 @50MHz	350	0.65	750	J,KM
HCW1812-1R0□	1.00	7.9	60 @50MHz	250	1.20	480	J,KM
HCW1812-1R5□	1.50	7.9	60 @50MHz	210	1.60	430	J,KM
HCW1812-2R2□	2.20	7.9	35 @50MHz	150	2.20	340	J,KM
HCW1812-2R7□	2.70	7.9	55 @50MHz	150	3.20	300	J,KM
HCW1812-3R3□	3.30	7.9	55 @50MHz	130	3.80	270	J,KM
HCW1812-3R9□	3.90	7.9	55 @50MHz	120	5.00	240	J,KM
HCW1812-4R7□	4.70	7.9	25 @50MHz	90	5.40	230	J,KM
HCW1812-5R6□	5.60	7.9	45 @50MHz	90	5.70	220	J,KM
HCW1812-6R8□	6.80	7.9	30 @50MHz	80	6.60	210	J,KM
HCW1812-8R2□	8.20	7.9	20 @50MHz	70	7.00	200	J,KM
HCW1812-100□	10.00	7.9	15 @50MHz	50	7.70	190	G,J,K,M
HCW1812-120□	12.00	2.5	30 @10MHz	50	8.70	180	G,J,K,M
HCW1812-150□	15.00	2.5	30 @10MHz	30	9.60	170	G,J,K,M
HCW1812-180□	18.00	2.5	25 @10MHz	30	10.50	160	G,J,K,M
HCW1812-220□	22.00	2.5	25 @10MHz	20	11.50	155	G,J,K,M
HCW1812-270□	27.00	2.5	25 @10MHz	20	12.50	150	G,J,K,M
HCW1812-330□	33.00	2.5	10 @10MHz	10	13.50	145	G,J,K,M

Note: When ordering, please specify tolerance code. Tolerance: S= \pm 0.3nH , D= \pm 0.5nH , G= \pm 2% , J= \pm 5% , K= \pm 10% , M= \pm 20%

- Operating temperature range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$ (Including self - temperature rise)
- Rating DC current: Temperature rise (ΔT) is 40°C approximately at Irms
- Moisture sensitivity level (MSL) 2 (1 year floor life at $<30^{\circ}\text{C}/65\%$ relative humidity)

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 Wire Wound Ceramic Chip Inductors - HCW Series

Packaging Specifications

Figure 1

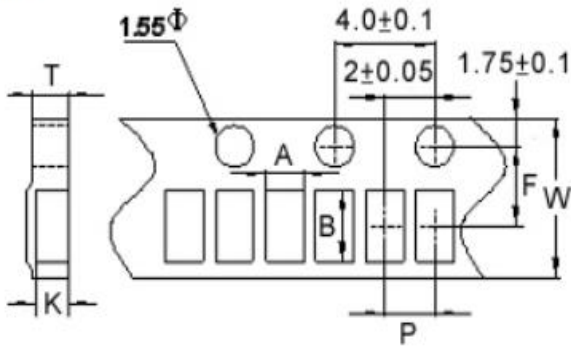


Figure 2

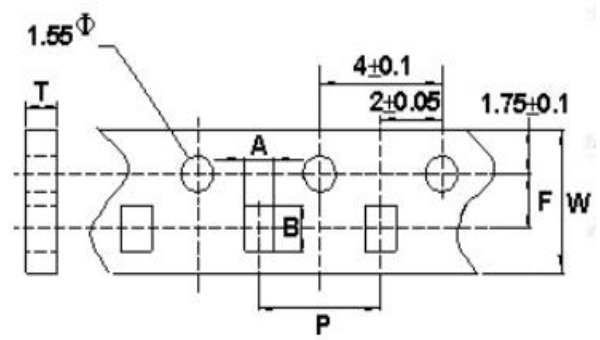
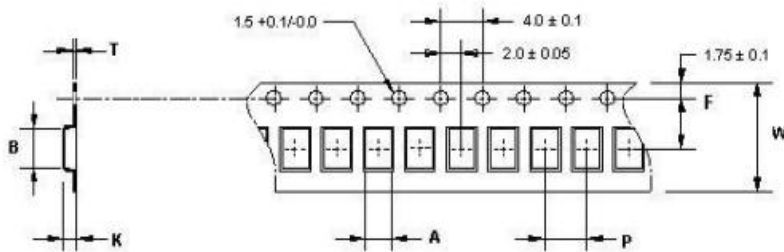
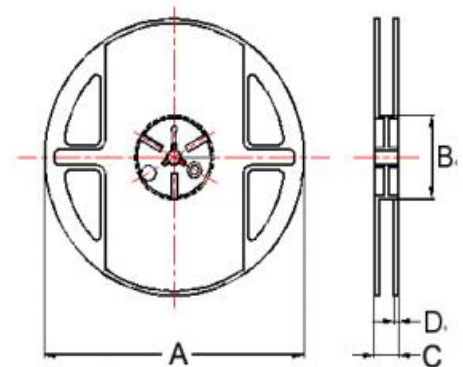


Figure 3



Reel Dimensions



Dimensions in mm

TYPE	Fig.	Tape Dimensions							Reel Dimensions				Quantity PCS/REEL
		A	B	T	W	P	F	K	A	B	C	D	
HCW0402	1	0.74	1.23	0.75	8	2	3.5	0.59	178	60	13	2.0	10000
HCW0603	2	1.15	1.83	0.95	8	4	3.5	-	178	60	13	2.0	4000
HCW0805	3	1.85	2.40	0.23	8	4	3.5	1.45	178	60	13	2.0	2000
HCW1008	3	2.96	3.60	0.23	8	4	3.5	2.40	178	60	13	2.0	2000
HCW1210	3	2.96	3.60	0.23	8	4	3.5	2.40	178	60	13	2.0	2000
HCW1812	3	3.90	4.90	0.30	12	8	5.5	3.20	178	60	16	1.4	500