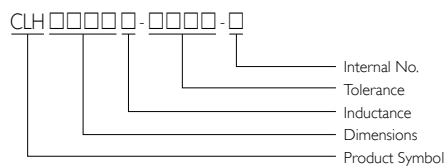


SMD Multilayer Chip Inductors

CLH Series



PRODUCT IDENTIFICATION



■ Packaging: T = Tape and Reel, B = Bulk

■ Internal No.: N = Lead-Free

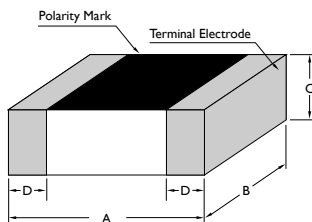
■ Product Series Identification:

CLH1005-S: Top side full mark, CLH1608-S: Top side full mark

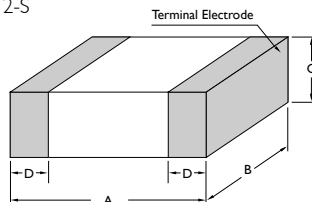
CLH2012-S: White

SHAPES AND DIMENSIONS

CLH1005-S / CLH1608-S



CLH2012-S



APPLICATIONS

RF Resonance and Impedance Matching Circuit

RF and Wireless Communication

Information technology equipment, computers, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, PDAs, keyless remote systems.

Use in L-C Filter Configurations

OUTLINE

Yageo high frequency multilayer ceramic chip inductor is formed without wound wire.

Monolithic laminated structure

FEATURES

Meet RoHS Criteria for Lead-Free Product

Excellent Q Factor and SRF Characteristic

Cost Effective

Small size of 1005/1608 is suitable for small portable equipment.

Support operating frequency up to 6 GHz with nominal inductance values from 1.0 nH to 470 nH.

Unit: mm

TYPE	INDUCTANCE RANGE	A	B	C	D
CLH1005	ALL	1.0 ± 0.10	0.50 ± 0.10	0.50 ± 0.10	0.25 ± 0.10
CLH1608	ALL	1.6 ± 0.15	0.8 ± 0.15	0.8 ± 0.15	0.3 ± 0.2
CLH2012	< 390 nH	2.0 ± 0.2	1.25 ± 0.2	0.9 ± 0.2	0.5 ± 0.3
CLH2012	≥ 390 nH	2.0 ± 0.2	1.25 ± 0.2	1.25 ± 0.2	0.5 ± 0.3



ELECTRICAL CHARACTERISTICS CLH1608-N

PART NO.	INDUCTANCE at 100MHz (nH)	TOLERANCE	Q Min.		Q TYPICAL					SRF (MHz) Min.	DC RESISTANCE (Ω) Max.	RATED CURRENT (mA) Max.
			at 50MHz	at 100MHz	at 50MHz	at 100MHz	at 300MHz	at 500MHz	at 800MHz			
CLH1608T-1N0S-N	1.0	S		8		12			60	10,000	0.10	600
CLH1608T-1N2S-N	1.2	S		8		13			60	10,000	0.10	600
CLH1608T-1N5S-N	1.5	S		8		13			57	8,000	0.10	600
CLH1608T-1N8S-N	1.8	S		8		13			51	8,000	0.10	600
CLH1608T-2N2S-N	2.2	S		8		13			46	7,200	0.10	600
CLH1608T-2N7S-N	2.7	S		10		13			46	6,200	0.10	600
CLH1608T-3N3□-N	3.3	S / K		10		13			47	5,200	0.12	600
CLH1608T-3N9□-N	3.9	S / K		10		13			47	5,000	0.14	600
CLH1608T-4N7□-N	4.7	S / K		10		13			41	4,750	0.16	600
CLH1608T-5N6□-N	5.6	S / K		10		13			41	4,100	0.18	600
CLH1608T-6N8□-N	6.8	J / K		10		13			44	3,750	0.22	600
CLH1608T-8N2□-N	8.2	J / K		10		13			44	3,300	0.24	600
CLH1608T-10N□-N	10	J / K		12		13			45	3,000	0.26	600
CLH1608T-12N□-N	12	J / K		12		15			46	2,600	0.28	600
CLH1608T-15N□-N	15	J / K		12		15			48	2,500	0.32	600
CLH1608T-18N□-N	18	J / K		12		15			48	2,400	0.35	600
CLH1608T-22N□-N	22	J / K		12		17			45	2,000	0.40	500
CLH1608T-27N□-N	27	J / K		12		17			43	1,900	0.45	500
CLH1608T-33N□-N	33	J / K		12		18			39	1,600	0.55	400
CLH1608T-39N□-N	39	J / K		12		18		37		1,400	0.60	400
CLH1608T-47N□-N	47	J / K		12		18		35		1,300	0.70	400
CLH1608T-56N□-N	56	J / K		12		18		32		1,100	0.75	400
CLH1608T-62N□-N	62	J / K		12		18		34		1,050	0.85	400
CLH1608T-68N□-N	68	J / K		12		18		34		1,050	0.85	400
CLH1608T-82N□-N	82	J / K		12		18		32		900	1.00	300
CLH1608T-R10□-N	100	J / K		12		18		20		770	1.20	300
CLH1608T-R12□-N	*120	J / K	8			14		20		650	1.30	300
CLH1608T-R15□-N	*150	J / K	8			15		16		550	1.70	250
CLH1608T-R18□-N	*180	J / K	8			15		16		520	1.90	250
CLH1608T-R22□-N	*220	J / K	8			15		16		500	2.00	250
CLH1608T-R27□-N	*270	J / K	8			13		14		470	2.20	150
CLH1608T-R33□-N	*330	J / K	8			13		-		320	2.80	100
CLH1608T-R39□-N	*390	J / K	8			13		-		300	3.00	100

Note:

* at 50MHz

Tolerance: S = ± 0.3 nH, J = $\pm 5\%$, K = $\pm 10\%$

Test Instruments: L/Q- HP4291A+HPI6192A

SRF- HP4291A+HPI6192A

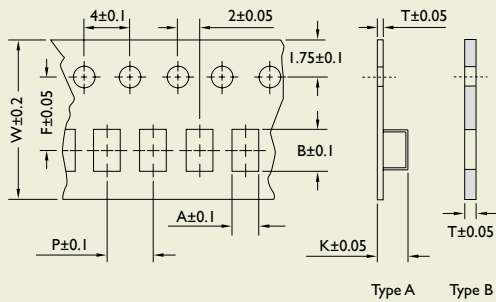
RDC- HP4338B/ CH502BC

IDC- HP4291A+HP6632A



TAPE DIMENSIONS

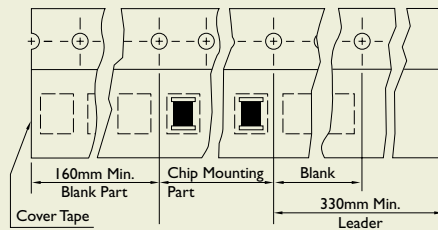
Unit: mm



TYPE	A	B	T	W	P	F	K	TAPE TYPE
CLH1005	0.65	1.15	0.60	8	2	3.5	-	B
CLH1608	1.00	1.80	0.95	8	4	3.5	-	B
CLH201209	1.42	2.25	0.22	8	4	3.5	1.04	A/B
CLH201212	1.35	2.25	0.22	8	4	3.5	1.35	A

TAPE MATERIAL

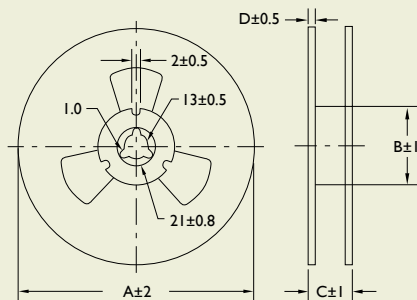
PACKAGING QUANTITY



TYPE	QUANTITY/REEL
CLH1005	10,000
CLH1608	4,000
CLH201209	4,000
CLH201212	3,000

REEL DIMENSIONS

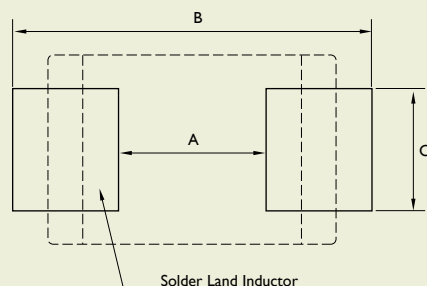
Unit: mm



TYPE	A	B	C	D
CLH1005	178	60	12	1.5
CLH1608	178	60	12	1.5
CLH201209	178	60	12	1.5
CLH201212	178	60	12	1.5

RECOMMENDED PATTERN

Unit: mm



TYPE	A	B	C
CLH1005	0.40	1.2 ~ 1.4	0.40
CLH1608	0.80	2.4 ~ 3.4	0.60
CLH201209	1.20	3.0 ~ 4.0	1.00
CLH201212	1.20	3.0 ~ 4.0	1.00