



SMD CHIP INDUCTOR

JYHF SERIES



## **FEATURES/APPLICATOINS**

- .Carrier tape packing use for SMT
- .Can be used in a wide range of frequency to suppress EMI
- .Excellent solder ability
- .Suitable for reflow STM craft soldering
- .Lead free products, ROHS compliant
- .Widely use in Noise suppression in Digital equipment such as Computer peripheral devices /VCR /VCD /DVD /Camera /OA equipments etc.

## Page

PRODUCT INDICATION.....	2
SHAPE AND DIMENSIONS.....	2
JYHF0603.....	4
JYHF1005.....	5
JYHF1608.....	7
JYHF2012.....	9

## PRODUCT INDICATION

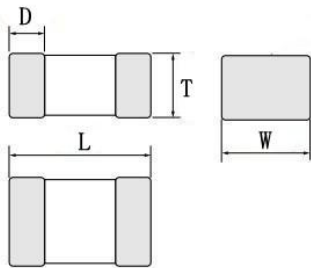
**JYHF 1608 C R10 J**

① ② ③ ④ ⑤

- ① Product type: JYHF type
- ② External dimension: 16 for Diameter 1.6mm, 08 for Width 0.8mm
- ③ Material code: F, C, L, Q, S, T
- ④ Nominal impedance: R10 for 100NH
- ⑤ Tolerance: S for  $\pm 0.3nH$  J for  $\pm 5\%$  K for  $\pm 10\%$

## SHAPE AND DIMENSIONS

unit mm(inch)



PartNO	L	W	T	D
0603 (0201)	0.6 $\pm$ 0.03 (0.023 $\pm$ 0.006)	0.3 $\pm$ 0.03 (0.012 $\pm$ 0.006)	0.3 $\pm$ 0.03 (0.012 $\pm$ 0.006)	0.15 $\pm$ 0.05 (0.005 $\pm$ 0.006)
1005 (0402)	1.0 $\pm$ 0.15 (0.040 $\pm$ 0.006)	0.5 $\pm$ 0.15 (0.020 $\pm$ 0.006)	0.5 $\pm$ 0.15 (0.020 $\pm$ 0.006)	0.25 $\pm$ 0.10 (0.010 $\pm$ 0.004)
1608 (0603)	1.6 $\pm$ 0.2 (0.063 $\pm$ 0.008)	0.8 $\pm$ 0.2 (0.031 $\pm$ 0.008)	0.8 $\pm$ 0.2 (0.031 $\pm$ 0.008)	0.3 $\pm$ 0.2 (0.01 $\pm$ 0.008)
2012 (0805) 1.5nh~220nh	2.0 $\pm$ 0.2 (0.079 $\pm$ 0.008)	1.2 $\pm$ 0.2 (0.047 $\pm$ 0.008)	0.9 $\pm$ 0.2 (0.035 $\pm$ 0.008)	0.5 $\pm$ 0.3 (0.020 $\pm$ 0.012)
2012 (0805) 270nh~470nh	2.0 $\pm$ 0.2 (0.079 $\pm$ 0.008)	1.2 $\pm$ 0.2 (0.047 $\pm$ 0.008)	1.0 $\pm$ 0.2 (0.039 $\pm$ 0.008)	0.5 $\pm$ 0.3 (0.020 $\pm$ 0.012)

■ Notes:

● HP4191A

Impedance instrument HP4191A Impedance analyzer

● 100MHz

Inductance testing condition: 100MHz.

●DCR instrument: TH2512B or DCR test equipment equivalent .

● Rated Current test: VR7210&VR113H.

●Rated Current definition: Inductance drop by 25% or temperature rise by 40℃ ,  
the lesser of the minimum as the rated current.

Temperature storage:-25~80 ; the relative humidity : RH65%~85%

## Electrical Characteristics JYHF0603(0201) Series(15000pcs/reel)

Part NO	L(nH)	L Tol	Q Min	L,Q Test Freq(MHz)	S.R.F (MHz)Min	DCR( $\Omega$ )Max	Ir(mA)Max
JYHF0603C1N0S	1	$\pm 0.3nH$	4	100	>10000	0.11	470
JYHF0603C1N2S	1.2	$\pm 0.3nH$	4	100	>10000	0.12	450
JYHF0603C1N5S	1.5	$\pm 0.3nH$	4	100	>10000	0.13	430
JYHF0603C1N8S	1.8	$\pm 0.3nH$	4	100	>10000	0.16	390
JYHF0603C2N0S	2	$\pm 0.3nH$	4	100	>10000	0.17	380
JYHF0603C2N2S	2.2	$\pm 0.3nH$	4	100	8800	0.19	360
JYHF0603C2N4S	2.4	$\pm 0.3nH$	4	100	8300	0.2	350
JYHF0603C2N7S	2.7	$\pm 0.3nH$	4	100	7700	0.21	340
JYHF0603C3N0S	3	$\pm 0.3nH$	4	100	7200	0.22	330
JYHF0603C3N3S	3.3	$\pm 0.3nH$	4	100	6700	0.23	320
JYHF0603C3N6S	3.6	$\pm 0.3nH$	4	100	6400	0.25	310
JYHF0603C3N9S	3.9	$\pm 0.3nH$	4	100	6000	0.27	300
JYHF0603C4N3S	4.3	$\pm 0.3nH$	4	100	5700	0.3	280
JYHF0603C4N7S	4.7	$\pm 0.3nH$	4	100	5300	0.3	280
JYHF0603C5N1S	5.1	$\pm 0.3nH$	4	100	5000	0.33	270
JYHF0603C5N6S	5.6	$\pm 0.3nH$	4	100	4600	0.36	260
JYHF0603C6N2S	6.2	$\pm 0.3nH$	4	100	4200	0.38	250
JYHF0603C6N8J	6.8	5%	4	100	3900	0.39	250
JYHF0603C7N5J	7.5	5%	4	100	3600	0.41	240
JYHF0603C8N2J	8.2	5%	4	100	3400	0.45	230
JYHF0603C9N1J	9.1	5%	4	100	3200	0.48	220
JYHF0603C10NJ	10	5%	4	100	2900	0.51	220
JYHF0603C12NJ	12	5%	4	100	2700	0.68	190
JYHF0603C15NJ	15	5%	4	100	2300	0.71	180
JYHF0603C18NJ	18	5%	4	100	2100	0.81	170
JYHF0603C22NJ	22	5%	4	100	1800	1	150
JYHF0603C27NJ	27	5%	4	100	1800	1.35	120
JYHF0603C33NJ	33	5%	4	100	1700	1.47	110
JYHF0603C39NJ	39	5%	4	100	1500	1.72	100
JYHF0603C47NJ	47	5%	4	100	1300	1.9	100
JYHF0603C56NJ	56	5%	4	100	1100	2.27	80
JYHF0603C68NJ	68	5%	4	100	1100	2.66	80
JYHF0603C82NJ	82	5%	4	100	1000	3.37	70
JYHF0603CR10J	100	5%	4	100	900	3.74	60

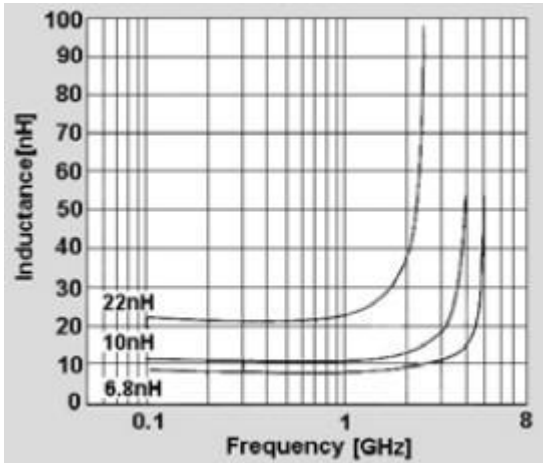
## Electrical Characteristics JYHF1005(0402) Series(10000pcs/reel)

OPEARATING TEMP.-55~125°C

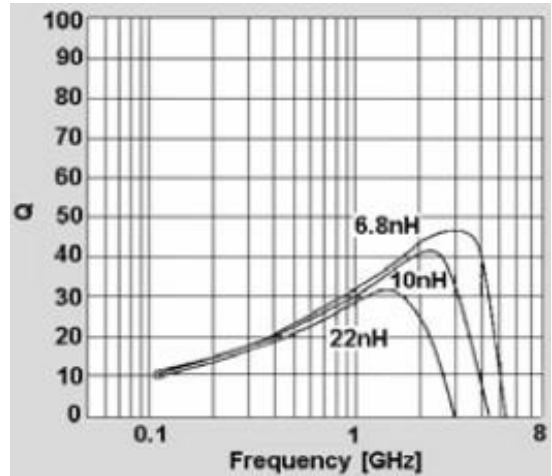
Part NO	L(nH)	L Tol	Q Min	L,Q Test Freq(MHz)	S.R.F (MHz)Min	DCR(Ω)Max	Ir(mA)Max
JYHF1005C1N0S	1	±0.3nH	8	100	6000	0.1	400
JYHF1005C1N2S	1.2	±0.3nH	8	100	6000	0.1	400
JYHF1005C1N5S	1.5	±0.3nH	8	100	6000	0.13	400
JYHF1005C1N8S	1.8	±0.3nH	8	100	6000	0.14	400
JYHF1005C2N2S	2.2	±0.3nH	8	100	6000	0.16	400
JYHF1005C2N7S	2.7	±0.3nH	8	100	5500	0.17	400
JYHF1005C3N3S	3.3	±0.3nH	8	100	5500	0.19	400
JYHF1005C3N9S	3.9	±0.3nH	8	100	5200	0.22	400
JYHF1005C4N7S	4.7	±0.3nH	8	100	4800	0.24	400
JYHF1005C5N6S	5.6	±0.3nH	8	100	4600	0.27	400
JYHF1005C6N8J	6.8	±5%	8	100	4000	0.32	300
JYHF1005C8N2J	8.2	±5%	8	100	3600	0.37	300
JYHF1005C10NJ	10	±5%	8	100	3200	0.42	300
JYHF1005C12NJ	12	±5%	8	100	2800	0.5	300
JYHF1005C15NJ	15	±5%	8	100	2500	0.55	300
JYHF1005C18NJ	18	±5%	8	100	2200	0.65	300
JYHF1005C22NJ	22	±5%	8	100	2000	0.8	200
JYHF1005C27NJ	27	±5%	8	100	1600	0.9	200
JYHF1005C33NJ	33	±5%	8	100	1300	1	200
JYHF1005C39NJ	39	±5%	8	100	1200	1.2	150
JYHF1005C47NJ	47	±5%	8	100	1000	1.3	150
JYHF1005C56NJ	56	±5%	8	100	900	1.6	150
JYHF1005C68NJ	68	±5%	8	100	900	2.1	150
JYHF1005C82NJ	82	±5%	8	100	900	2.4	150
JYHF1005CR10J	100	±5%	8	100	900	2.6	150

## CHARACTERISTICS CURVES

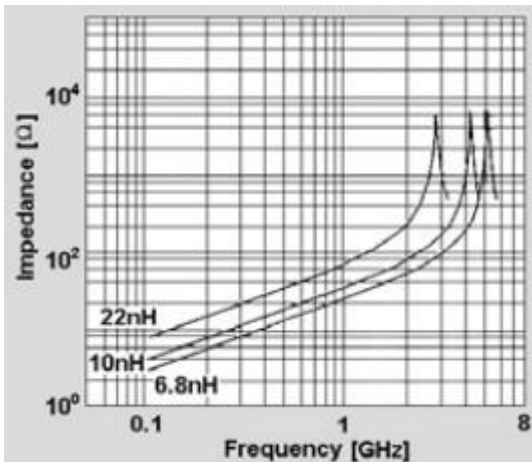
### Inductance VS. Frequency



### Q Value VS. Frequency



### Impedance VS. Frequency



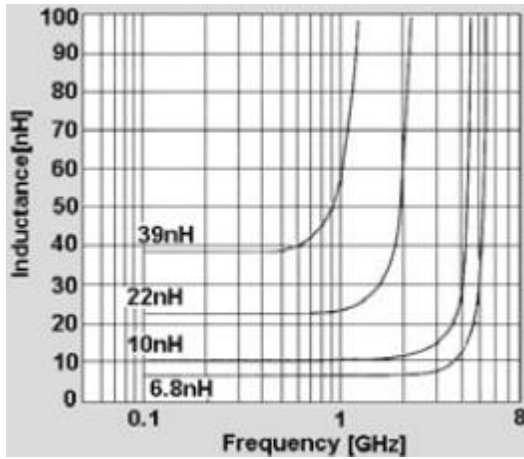
## Electrical Characteristics JYHF1608(0603) Series(4000pcs/reel)

OPERATING TEMP. -40~+85°C

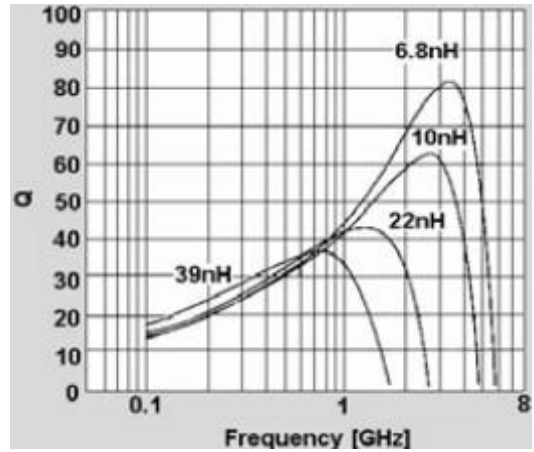
Part NO	L(nH)	L Tol	Q Min	L,Q Test Freq(MHz)	S.R.F (MHz)Min	DCR(Ω)Max	Ir(mA)Max
JYHF1608C1N5S	1.5	±0.3nH	8	100	6000	0.1	500
JYHF1608C1N8S	1.8	±0.3nH	8	100	6000	0.12	500
JYHF1608C2N2S	2.2	±0.3nH	8	100	6000	0.2	500
JYHF1608C2N7S	2.7	±0.3nH	8	100	6000	0.2	500
JYHF1608C3N3S	3.3	±0.3nH	8	100	6000	0.2	500
JYHF1608C3N9S	3.9	±0.3nH	8	100	6000	0.2	500
JYHF1608C4N7S	4.7	±0.3nH	8	100	6000	0.2	500
JYHF1608C5N6S	5.6	±0.3nH	8	100	5500	0.3	500
JYHF1608C6N8J	6.8	±5%±10%	8	100	5300	0.3	500
JYHF1608C8N2J	8.2	±5%±10%	8	100	5100	0.3	500
JYHF1608C10NJ	10	±5%±10%	8	100	4800	0.5	300
JYHF1608C12NJ	12	±5%±10%	8	100	4500	0.5	300
JYHF1608C15NJ	15	±5%±10%	8	100	4200	0.6	300
JYHF1608C18NJ	18	±5%±10%	8	100	3900	0.6	300
JYHF1608C22NJ	22	±5%±10%	8	100	3600	0.6	300
JYHF1608C27NJ	27	±5%±10%	8	100	3300	0.8	300
JYHF1608C33NJ	33	±5%±10%	8	100	3000	0.8	300
JYHF1608C39NJ	39	±5%±10%	8	100	2500	0.8	300
JYHF1608C47NJ	47	±5%±10%	8	100	2400	1	300
JYHF1608C56NJ	56	±5%±10%	8	100	2200	1	300
JYHF1608C68NJ	68	±5%±10%	8	100	1000	1	300
JYHF1608C82NJ	82	±5%±10%	8	100	800	1	300
JYHF1608CR10J	100	±5%±10%	8	100	700	1	300
JYHF1608CR12J	120	±5%±10%	8	50	600	1.2	300
JYHF1608CR15J	150	±5%±10%	8	50	500	1.4	300
JYHF1608CR18J	180	±5%±10%	8	50	400	1.6	300
JYHF1608CR22J	220	±5%±10%	8	50	350	1.8	300

## CHARACTERISTICS CURVES

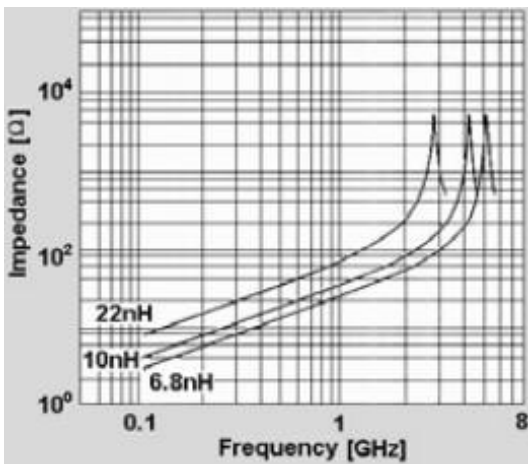
### Inductance VS. Frequency



### Q Value VS. Frequency



### Impedance VS. Frequency





## Electrical Characteristics JYHF2012(0805) Series (between 1.5nH to 220nH)

(4000pcs/reel)

OPERATING TEMP.-40~+85°C

Part NO	L(nH)	L Tol	Q Min	L,Q Test		DCR( $\Omega$ )Max	Ir(mA)Max
				Freq(MHz)	S.R.F (MHz)Min		
JYHF2012C1N5S	1.5	$\pm 0.3$ nH	10	100	6000	0.1	600
JYHF2012C1N8S	1.8	$\pm 0.3$ nH	10	100	6000	0.1	600
JYHF2012C2N2S	2.2	$\pm 0.3$ nH	10	100	6000	0.1	600
JYHF2012C2N7S	2.7	$\pm 0.3$ nH	10	100	6000	0.1	600
JYHF2012C3N3S	3.3	$\pm 0.3$ nH	10	100	6000	0.13	600
JYHF2012C3N9S	3.9	$\pm 0.3$ nH	10	100	5400	0.15	600
JYHF2012C4N7S	4.7	$\pm 0.3$ nH	10	100	4500	0.2	400
JYHF2012C5N6S	5.6	$\pm 0.3$ nH	10	100	4000	0.23	400
JYHF2012C6N8J	6.8	$\pm 5\% \pm 10\%$	10	100	3650	0.25	400
JYHF2012C8N2J	8.2	$\pm 5\% \pm 10\%$	10	100	3000	0.28	400
JYHF2012C10NJ	10	$\pm 5\% \pm 10\%$	10	100	2500	0.3	300
JYHF2012C12NJ	12	$\pm 5\% \pm 10\%$	10	100	2450	0.35	300
JYHF2012C15NJ	15	$\pm 5\% \pm 10\%$	10	100	2000	0.4	300
JYHF2012C18NJ	18	$\pm 5\% \pm 10\%$	10	100	1750	0.45	300
JYHF2012C22NJ	22	$\pm 5\% \pm 10\%$	13	100	1700	0.5	300
JYHF2012C27NJ	27	$\pm 5\% \pm 10\%$	15	100	1550	0.55	300
JYHF2012C33NJ	33	$\pm 5\% \pm 10\%$	15	100	1350	0.6	300
JYHF2012C39NJ	39	$\pm 5\% \pm 10\%$	15	100	1300	0.65	300
JYHF2012C47NJ	47	$\pm 5\% \pm 10\%$	15	100	1200	0.7	300
JYHF2012C56NJ	56	$\pm 5\% \pm 10\%$	15	100	1150	0.75	300
JYHF2012C68NJ	68	$\pm 5\% \pm 10\%$	15	100	1000	0.8	300
JYHF2012C82NJ	82	$\pm 5\% \pm 10\%$	15	100	850	0.9	300
JYHF2012CR10J	100	$\pm 5\% \pm 10\%$	15	100	600	1	300
JYHF2012CR12J	120	$\pm 5\% \pm 10\%$	15	50	500	1.5	300
JYHF2012CR15J	150	$\pm 5\% \pm 10\%$	13	50	500	1.5	300
JYHF2012CR18J	180	$\pm 5\% \pm 10\%$	13	50	400	2.1	300
JYHF2012CR22J	220	$\pm 5\% \pm 10\%$	12	50	350	2.1	300

**Electrical Characteristics JYHF2012(0805) Series (between 220nH to 470nH)**

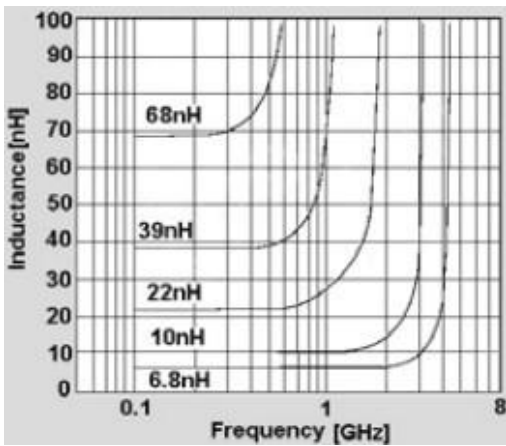
(15000pcs/reel)

OPERATING TEMP.-40~+85°C

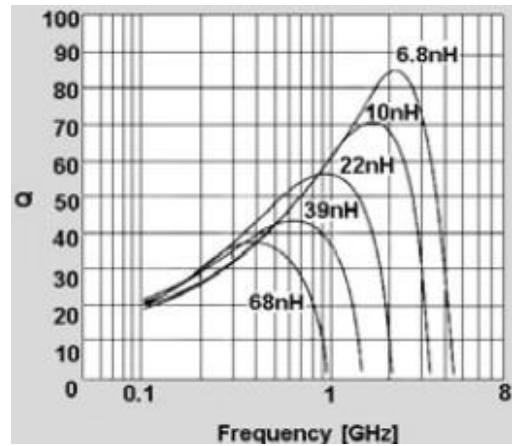
Part NO	L(nH)	L Tol	Q Min	L,Q Test Freq(MHz)	S.R.F (MHz)Min	DCR(Ω)Max	Ir(mA)Max
JYHF2012CR27J	270	±5%±10%	12	50	300	3	200
JYHF2012CR33J	330	±5%±10%	12	50	250	3	200
JYHF2012CR39J	390	±5%±10%	10	50	250	3.5	200
JYHF2012CR47J	470	±5%±10%	10	50	200	3.5	200

**CHARACTERISTICS CURVES**

**Inductance VS. Frequency**



**Q Value VS. Frequency**



**Impedance VS. Frequency**

