SMD CHIP INDUCTOR

DHF 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

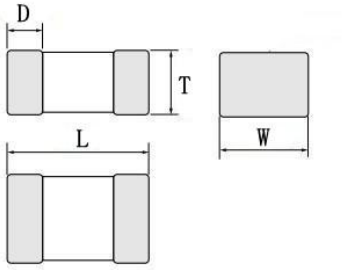
PRODUCT INDICATION

D H F	1608	C	R10	J
①	②	③	④	⑤

① Product type: DHF 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 ±0.3nH J for ±5% K for ±10%

SHAPE AND DIMENSIONS

unit mm(inch)



PartNO	L	W	T	D
0603 (0201)	0.6±0.03 (0.023±0.006)	0.3±0.03 (0.012±0.006)	0.3±0.03 (0.012±0.006)	0.15±0.05 (0.005±0.006)
1005 (0402)	1.0±0.15 (0.040±0.006)	0.5±0.15 (0.020±0.006)	0.5±0.15 (0.020±0.006)	0.25±0.10 (0.010±0.004)
1608 (0603)	1.6±0.2 (0.063±0.008)	0.8±0.2 (0.031±0.008)	0.8±0.2 (0.031±0.008)	0.3±0.2 (0.01±0.008)
2012 (0805) 1.5nh~220nh	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	0.9±0.2 (0.035±0.008)	0.5±0.3 (0.020±0.012)
2012 (0805) 270nh~470nh	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	1.0±0.2 (0.039±0.008)	0.5±0.3 (0.020±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 DHF0603(0201) Series(15000pcs/reel)

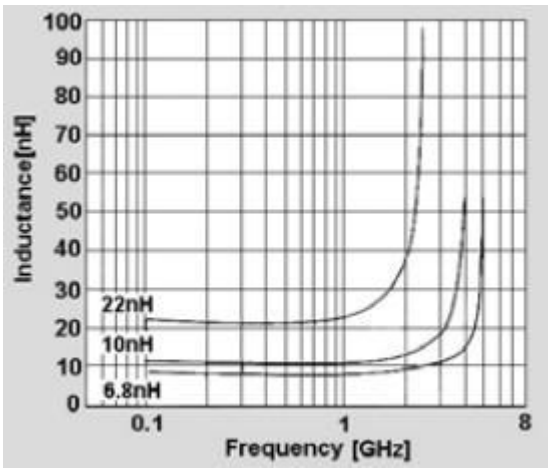
Part NO	L(nH)	L Tol	Q Min	L,Q Test Freq(MHz)	S.R.F (MHz)Min	DCR(Ω)Max	Ir(mA)Max
DHF0603C1N0S	1	±0.3nH	4	100	>10000	0.11	470
DHF0603C1N2S	1.2	±0.3nH	4	100	>10000	0.12	450
DHF0603C1N5S	1.5	±0.3nH	4	100	>10000	0.13	430
DHF0603C1N8S	1.8	±0.3nH	4	100	>10000	0.16	390
DHF0603C2N0S	2	±0.3nH	4	100	>10000	0.17	380
DHF0603C2N2S	2.2	±0.3nH	4	100	8800	0.19	360
DHF0603C2N4S	2.4	±0.3nH	4	100	8300	0.20	350
DHF0603C2N7S	2.7	±0.3nH	4	100	7700	0.21	340
DHF0603C3N0S	3	±0.3nH	4	100	7200	0.22	330
DHF0603C3N3S	3.3	±0.3nH	4	100	6700	0.23	320
DHF0603C3N6S	3.6	±0.3nH	4	100	6400	0.25	310
DHF0603C3N9S	3.9	±0.3nH	4	100	6000	0.27	300
DHF0603C4N3S	4.3	±0.3nH	4	100	5700	0.30	280
DHF0603C4N7S	4.7	±0.3nH	4	100	5300	0.30	280
DHF0603C5N1S	5.1	±0.3nH	4	100	5000	0.33	270
DHF0603C5N6S	5.6	±0.3nH	4	100	4600	0.36	260
DHF0603C6N2S	6.2	±0.3nH	4	100	4200	0.38	250
DHF0603C6N8J	6.8	5%	4	100	3900	0.39	250
DHF0603C7N5J	7.5	5%	4	100	3600	0.41	240
DHF0603C8N2J	8.2	5%	4	100	3400	0.45	230
DHF0603C9N1J	9.1	5%	4	100	3200	0.48	220
DHF0603C10NJ	10	5%	4	100	2900	0.51	220
DHF0603C12NJ	12	5%	4	100	2700	0.68	190
DHF0603C15NJ	15	5%	4	100	2300	0.71	180
DHF0603C18NJ	18	5%	4	100	2100	0.81	170
DHF0603C22NJ	22	5%	4	100	1800	1.00	150
DHF0603C27NJ	27	5%	4	100	1800	1.35	120
DHF0603C33NJ	33	5%	4	100	1700	1.47	110
DHF0603C39NJ	39	5%	4	100	1500	1.72	100
DHF0603C47NJ	47	5%	4	100	1300	1.90	100
DHF0603C56NJ	56	5%	4	100	1100	2.27	80
DHF0603C68NJ	68	5%	4	100	1100	2.66	80
DHF0603C82NJ	82	5%	4	100	1000	3.37	70
DHF0603CR10J	100	5%	4	100	1000	3.74	60
DHF0603CR12J	120	5%	4	100	1000	4.00	50

Electrical Characteristics DHF1005(0402) Series(10000pcs/reel)

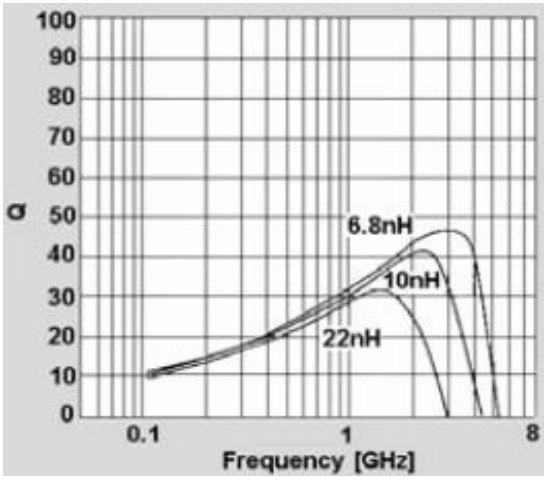
Part NO	L(nH)	L Tol	Q Min	L,Q Test Freq(MHz)	S.R.F (MHz)Min	DCR(Ω)Max	Ir(mA)Max
DHF1005C1N0S	1	±0.3nH	8	100	6000	0.10	400
DHF1005C1N2S	1.2	±0.3nH	8	100	6000	0.10	400
DHF1005C1N5S	1.5	±0.3nH	8	100	6000	0.13	400
DHF1005C1N8S	1.8	±0.3nH	8	100	6000	0.14	400
DHF1005C2N2S	2.2	±0.3nH	8	100	6000	0.16	400
DHF1005C2N7S	2.7	±0.3nH	8	100	5500	0.17	400
DHF1005C3N3S	3.3	±0.3nH	8	100	5500	0.19	400
DHF1005C3N9S	3.9	±0.3nH	8	100	5200	0.22	400
DHF1005C4N7S	4.7	±0.3nH	8	100	4800	0.24	400
DHF1005C5N6S	5.6	±0.3nH	8	100	4600	0.27	400
DHF1005C6N8J	6.8	±5%	8	100	4000	0.32	300
DHF1005C8N2J	8.2	±5%	8	100	3600	0.37	300
DHF1005C10NJ	10	±5%	8	100	3200	0.42	300
DHF1005C12NJ	12	±5%	8	100	2800	0.50	300
DHF1005C15NJ	15	±5%	8	100	2500	0.55	300
DHF1005C18NJ	18	±5%	8	100	2200	0.65	300
DHF1005C22NJ	22	±5%	8	100	2000	0.80	200
DHF1005C27NJ	27	±5%	8	100	1600	0.90	200
DHF1005C33NJ	33	±5%	8	100	1300	1.00	200
DHF1005C39NJ	39	±5%	8	100	1200	1.20	150
DHF1005C47NJ	47	±5%	8	100	1000	1.30	150
DHF1005C56NJ	56	±5%	8	100	900	1.60	150
DHF1005C68NJ	68	±5%	8	100	900	2.10	150
DHF1005C82NJ	82	±5%	8	100	900	2.40	150
DHF1005CR10J	100	±5%	8	100	900	2.60	150
DHF1005CR12J	120	±5%	8	100	800	2.80	150
DHF1005CR15J	150	±5%	8	100	700	3.50	100
DHF1005CR18J	180	±5%	8	100	600	3.80	100
DHF1005CR22J	220	±5%	8	100	500	4.20	100
DHF1005CR27J	270	±5%	8	100	500	4.80	100
DHF1005CR33J	330	±5%	8	100	350	7.00	50

CHARACTERISTICS CURVES

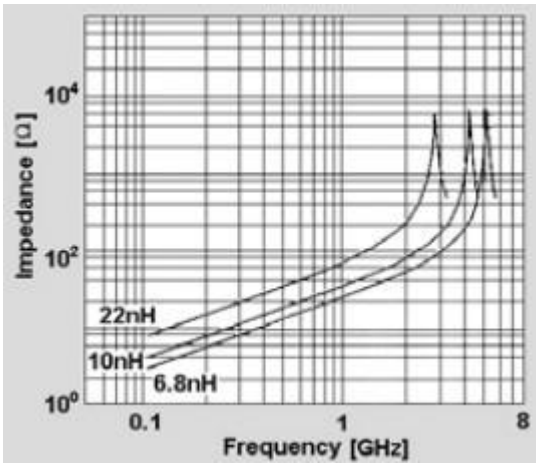
Inductance VS. Frenquency



Q Value VS. Frenquency



Impedance VS. Frenquency

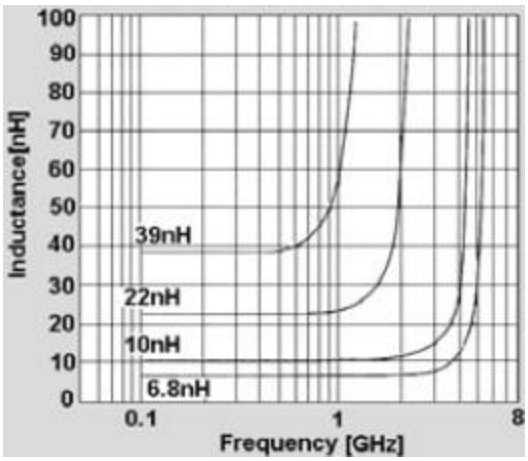


Electrical Characteristics DHF1608(0603) Series(4000pcs/reel)

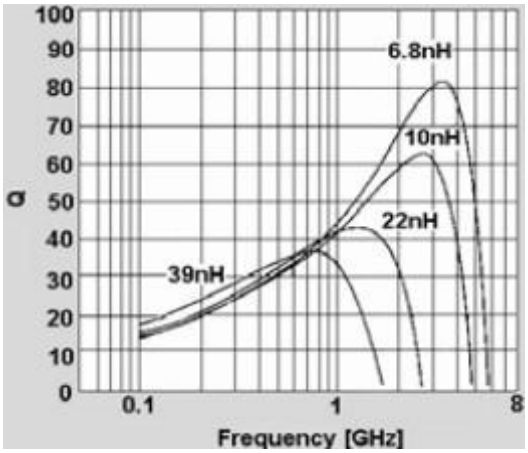
Part NO	L(nH)	L Tol	Q Min	L,Q Test Freq(MHz)	S.R.F (MHz)Min	DCR(Ω)Max	Ir(mA)Max
DHF1608C1N5S	1.5	±0.3nH	8	100	6000	0.10	500
DHF1608C1N8S	1.8	±0.3nH	8	100	6000	0.12	500
DHF1608C2N2S	2.2	±0.3nH	8	100	6000	0.20	500
DHF1608C2N7S	2.7	±0.3nH	8	100	6000	0.20	500
DHF1608C3N3S	3.3	±0.3nH	8	100	6000	0.20	500
DHF1608C3N6S	3.6	±0.3nH	8	100	6000	0.20	500
DHF1608C3N9S	3.9	±0.3nH	8	100	6000	0.20	500
DHF1608C4N7S	4.7	±0.3nH	8	100	6000	0.20	500
DHF1608C5N6S	5.6	±0.3nH	8	100	5500	0.30	500
DHF1608C6N2J	6.2	±5%±10%	8	100	5300	0.30	500
DHF1608C6N8J	6.8	±5%±10%	8	100	5300	0.30	500
DHF1608C8N2J	8.2	±5%±10%	8	100	5100	0.30	500
DHF1608C10NJ	10	±5%±10%	8	100	4800	0.50	300
DHF1608C12NJ	12	±5%±10%	8	100	4500	0.50	300
DHF1608C15NJ	15	±5%±10%	8	100	4200	0.60	300
DHF1608C18NJ	18	±5%±10%	8	100	3900	0.60	300
DHF1608C22NJ	22	±5%±10%	8	100	3600	0.60	300
DHF1608C27NJ	27	±5%±10%	8	100	3300	0.80	300
DHF1608C33NJ	33	±5%±10%	8	100	3000	0.80	300
DHF1608C39NJ	39	±5%±10%	8	100	2500	0.80	300
DHF1608C47NJ	47	±5%±10%	8	100	2400	1.00	300
DHF1608C56NJ	56	±5%±10%	8	100	2200	1.00	300
DHF1608C68NJ	68	±5%±10%	8	100	1000	1.00	300
DHF1608C82NJ	82	±5%±10%	8	100	800	1.00	300
DHF1608CR10J	100	±5%±10%	8	100	700	1.00	300
DHF1608CR12J	120	±5%±10%	8	50	600	1.20	200
DHF1608CR15J	150	±5%±10%	8	50	500	1.40	200
DHF1608CR18J	180	±5%±10%	8	50	400	1.60	200
DHF1608CR22J	220	±5%±10%	8	50	350	2.00	200
DHF1608CR27J	270	±5%±10%	8	50	350	2.60	150
DHF1608CR33J	330	±5%±10%	8	50	350	2.80	150
DHF1608CR39J	390	±5%±10%	8	50	300	3.20	150
DHF1608CR47J	470	±5%±10%	8	50	250	3.60	150
DHF1608CR56J	560	±5%±10%	8	50	250	4.00	100
DHF1608CR68J	680	±5%±10%	8	50	250	4.50	100

CHARACTERISTICS CURVES

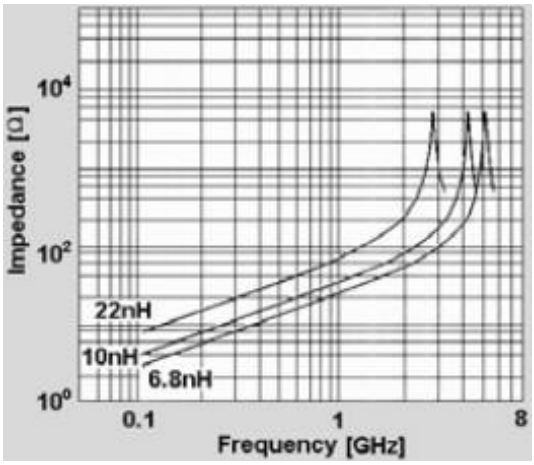
Inductance VS. Frenquency



Q Value VS. Frenquency



Impedance VS. Frenquency



Electrical Characteristics DHF2012(0805) Series（between 1.5nH to 220nH）

(4000pcs/reel)

Part NO	L(nH)	L Tol	Q Min	L,Q Test Freq(MHz)	S.R.F (MHz)Min	DCR(Ω)Max	Ir(mA)Max
DHF2012C1N5S	1.5	±0.3nH	10	100	6000	0.10	600
DHF2012C1N8S	1.8	±0.3nH	10	100	6000	0.10	600
DHF2012C2N2S	2.2	±0.3nH	10	100	6000	0.10	600
DHF2012C2N7S	2.7	±0.3nH	10	100	6000	0.10	600
DHF2012C3N3S	3.3	±0.3nH	10	100	6000	0.13	600
DHF2012C3N9S	3.9	±0.3nH	10	100	5400	0.15	600
DHF2012C4N7S	4.7	±0.3nH	10	100	4500	0.20	400
DHF2012C5N6S	5.6	±0.3nH	10	100	4000	0.23	400
DHF2012C6N8J	6.8	±5%±10%	10	100	3650	0.25	400
DHF2012C8N2J	8.2	±5%±10%	10	100	3000	0.28	400
DHF2012C10NJ	10	±5%±10%	10	100	2500	0.30	300
DHF2012C12NJ	12	±5%±10%	10	100	2450	0.35	300
DHF2012C15NJ	15	±5%±10%	10	100	2000	0.40	300
DHF2012C18NJ	18	±5%±10%	10	100	1750	0.45	300
DHF2012C22NJ	22	±5%±10%	13	100	1700	0.50	300
DHF2012C27NJ	27	±5%±10%	15	100	1550	0.55	300
DHF2012C33NJ	33	±5%±10%	15	100	1350	0.60	300
DHF2012C39NJ	39	±5%±10%	15	100	1300	0.65	300
DHF2012C47NJ	47	±5%±10%	15	100	1200	0.70	300
DHF2012C56NJ	56	±5%±10%	15	100	1150	0.75	300
DHF2012C68NJ	68	±5%±10%	15	100	1000	0.80	300
DHF2012C82NJ	82	±5%±10%	15	100	850	0.90	300
DHF2012CR10J	100	±5%±10%	15	100	600	1.00	300
DHF2012CR12J	120	±5%±10%	15	50	500	1.50	300
DHF2012CR15J	150	±5%±10%	13	50	500	1.50	300
DHF2012CR18J	180	±5%±10%	13	50	400	2.10	300
DHF2012CR22J	220	±5%±10%	12	50	350	2.10	300

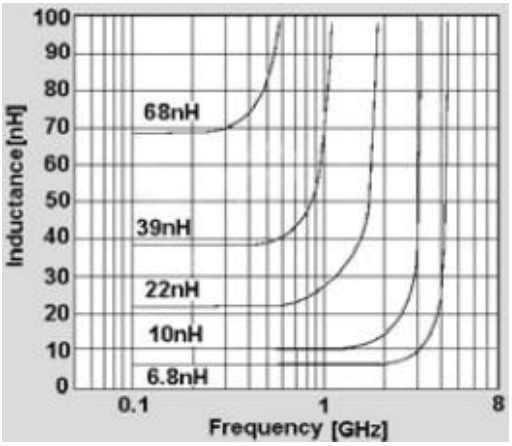
Electrical Characteristics DHF2012(0805) Series（between 220nH to 470nH）

(4000pcs/reel)

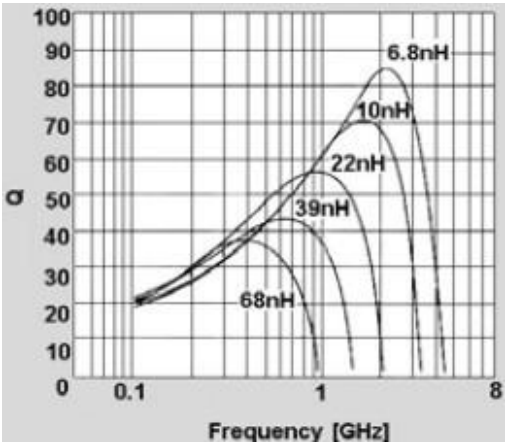
Part NO	L(nH)	L Tol	Q Min	L,Q Test Freq(MHz)	S.R.F (MHz)Min	DCR(Ω)Max	Ir(mA)Ma
DHF2012CR27J	270	±5%±10%	12	50	300	3.00	200
DHF2012CR33J	330	±5%±10%	12	50	250	3.00	200
DHF2012CR39J	390	±5%±10%	10	50	250	3.50	200
DHF2012CR47J	470	±5%±10%	10	50	200	3.50	200

CHARACTERISTICS CURVES

Inductance VS. Frenquency



Q Value VS. Frenquency



Impedance VS. Frenquency