

## Wire Wound Chip Ceramic Inductors

### Feature

- \* Minature Size, Suitable For SMT.
- \* Nusing Terminal Electrode Structure To Restrain The Parasitic Component Effect Quite Caused By Lead.
- \* 低电阻、高电流和高电感量  
High Q Value And Tight Inductance Tolerance.
- \* Excellent In Solderability And Heat Resistance.



### Application

- \* PDA

FHW 0805 UC 068 J S T  
⑥ ⑦

#### Product Typel

FHW

FHW: Wire Wound Inductor Series

Dimensions 0805(2.0x1.2mm) 1008 2.5x2.0mm 1210 3.2x2.5mm

Material Code UC/HC--- Ceramic Core

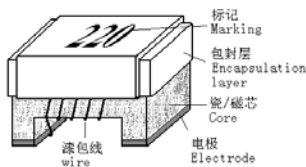
Inductance 1N0=1.0nH 010=10nH R10=100nH 1R0=1.0μH 100=10μH 101=100μH 102=1mH

Tolerance G---±2% J---±5% K---±10% M---±20%

Terminal G--- Gold S--- Tin

Packaging T: Tape & Reel B: Bulk

### Product Structure



**Dimension**

Unit mm inch

Size	L (Max)	W (Max)	T (Max)	A	B
2012 (0805)	2.30 (0.091)	1.70 (0.067)	1.52 (0.060)	1.27 (0.050)	0.50 (0.020)
2520 (1008)	2.92 (0.115)	2.79 (0.110)	2.10 (0.083)	2.00 (0.079)	0.50 (0.020)
3225 (1210)	3.50 (0.138)	2.90 (0.114)	2.25 (0.088)	2.10 (0.083)	0.50 (0.020)

**ELECTRICAL CHARACTERISTICS**

0805 Type

Part NO	Inductance (nH)	Tolerance	Q Q (Min)	SRF (MHZ) Min	Rdc Max	Idc(mA) Max
FHW0805UC2N2 GT	2.2@250MHz	10	50@1500MHz	8500	0.030	800
FHW0805UC2N7 GT	2.7@250MHz	10,5	50@1500MHz	8000	0.045	800
FHW0805UC3N3 GT	3.3@250MHz	10	35@1500MHz	7900	0.090	600
FHW0805UC4N7 GT	4.7@250MHz	10	40@1000MHz	6000	0.050	600
FHW0805UC5N GT	5.6@250MHz	10,5	50@1000MHz	5500	0.065	600
FHW0805UC6N8 GT	6.8@250MHz	10,5	50@1000MHz	5500	0.110	600
FHW0805UC8N2 GT	8.2@250MHz	10,5	35@1000MHz	4700	0.200	600
FHW0805UC010 GT	10@250MHz	10,5,2	50@500MHz	4200	0.150	600
FHW0805UC012 GT	12@250MHz	10,5,2	50@500MHz	4000	0.150	600
FHW0805UC015 GT	15@250MHz	10,5,2	45@500MHz	3400	0.170	600
FHW0805UC018 GT	18@250MHz	10,5,2	55@500MHz	3300	0.200	600
FHW0805UC022 GT	22@250MHz	10,5,2	55@500MHz	2600	0.220	500
FHW0805UC027 GT	27@250MHz	10,5,2	55@500MHz	2500	0.250	500
FHW0805UC033 GT	33@250MHz	10,5,2	55@500MHz	2050	0.270	500
FHW0805UC039 GT	39@250MHz	10,5,2	55@500MHz	2000	0.290	500
FHW0805UC047 GT	47@200MHz	10,5,2	55@500MHz	1650	0.310	500
FHW0805UC056 GT	56@200MHz	10,5,2	55@500MHz	1550	0.340	500
FHW0805UC068 GT	68@200MHz	10,5,2	55@500MHz	1450	0.380	500
FHW0805UC075 GT	75@200MHz	10,5,2	55@500MHz	1400	0.400	400
FHW0805UC082 GT	82@150MHz	10,5,2	55@500MHz	1300	0.420	400
FHW0805UCR10 GT	100@150MHz	10,5,2	50@500MHz	1200	0.460	400
FHW0805UCR12 GT	120@150MHz	10,5,2	45@250MHz	1100	0.510	400
FHW0805UCR15 GT	150@100MHz	10,5,2	45@250MHz	920	0.560	400
FHW0805UCR18 GT	180@100MHz	10,5,2	45@250MHz	870	0.640	400
FHW0805UCR22 GT	220@100MHz	10,5,2	40@250MHz	850	1.050	400
FHW0805UCR27 GT	270@100MHz	10,5,2	40@250MHz	650	1.100	350
FHW0805UCR33 GT	330@100MHz	10,5	40@250MHz	600	1.400	310
FHW0805UCR39 GT	390@100MHz	10,5	40@250MHz	560	1.500	290
FHW0805UCR47 GT	470@50MHz	10,5	33@100MHz	375	2.000	250

FHW0805UCR56 GT	560@25MHz	10,5	23@50MHz	340	1.900	230
FHW0805UCR68 GT	680@25MHz	10,5	23@50MHz	300	2.100	190
FHW0805UCR75 GT	750@25MHz	10,5	23@50MHz	280	2.120	180
FHW0805UCR82 GT	820@25MHz	10,5	23@50MHz	250	2.140	180
FHW0805UCR91 GT	910@25MHz	10,5	20@50MHz	220	2.280	180
FHW0805UC1R0 GT	1000@25MHz	10,5	20@50MHz	200	2.400	170
FHW0805UC1R2 GT	1200@7.9MHz	10,5	18@50MHz	180	2.550	170
FHW0805UC1R5 GT	1500@7.9MHz	10,5	18@50MHz	170	2.800	160
FHW0805UC1R8 GT	1800@7.9MHz	10,5	18@50MHz	140	3.800	150
FHW0805UC2R2 GT	2200@7.9MHz	10,5	16@7.9MHz	50	4.200	150

**1008Type**

Part NO	Inductance (nH)	Tolerance	Q	SRF (MHZ) Min	Rdc		Idc(mA) Max
			Q (Min)		Max	Max	
FHW1008UC3N9	3.9@50MHz	10,5	50@1500MHz	6000	0.035	1000	
FHW1008UC4N7	4.7@50MHz	10,5	50@1500MHz	6000	0.045	1000	
FHW1008UC5N6	5.6@50MHz	10,5	30@1000MHz	6000	0.180	1000	
FHW1008UC8N2	8.2 @50MHz	10,5	50@1000MHz	5000	0.050	1000	
FHW1008UC010	10@50MHz	10,5,2	50@500MHz	4100	0.080	1000	
FHW1008UC012	12@50MHz	10,5,2	50@500MHz	3300	0.090	1000	
FHW1008UC015	15@50MHz	10,5,2	45@500MHz	2500	0.150	1000	
FHW1008UC018	18@50MHz	10,5,2	50@350MHz	2500	0.110	1000	
FHW1008UC022	22@50MHz	10,5,2	55@350MHz	2400	0.120	1000	
FHW1008UC027	27@50MHz	10,5,2	55@350MHz	1600	0.130	1000	
FHW1008UC033	33@50MHz	10,5,2	60@350MHz	1600	0.140	1000	
FHW1008UC039	39@50MHz	10,5,2	60@350MHz	1500	0.150	1000	
FHW1008UC047	47@50MHz	10,5,2	65@350MHz	1500	0.160	1000	
FHW1008UC056	56@50MHz	10,5,2	65@350MHz	1100	0.180	1000	
FHW1008UC068	68@50MHz	10,5,2	65@350MHz	1000	0.200	1000	
FHW1008UC082	82@50MHz	10,5,2	60@350MHz	1000	0.220	1000	
FHW1008UCR10	100@25MHz	10,5,2	60@350MHz	1000	0.560	650	
FHW1008UCR12	120@25MHz	10,5,2	60@350MHz	950	0.630	650	
FHW1008UCR15	150@25MHz	10,5,2	45@100MHz	800	0.700	580	
FHW1008UCR18	180@25MHz	10,5,2	45@100MHz	640	0.770	620	
FHW1008UCR22	220@25MHz	10,5,2	45@100MHz	620	0.840	500	
FHW1008UCR27	270@25MHz	10,5,2	45@100MHz	600	0.910	500	
FHW1008UCR33	330@25MHz	10,5,2	45@100MHz	500	1.050	450	
FHW1008UCR39	390@25MHz	10,5,2	45@100MHz	480	1.120	470	

FHW1008UC1R0	1000@25MHz	10,5	35@50MHz	210	1.750	370
FHW1008UC1R2	1200@7.9MHz	10,5	35@50MHz	200	2.000	310
FHW1008UC1R5	1500@7.9MHz	10,5	28@50MHz	180	2.300	330
FHW1008UC1R8	1800@7.9MHz	10,5	28@50MHz			

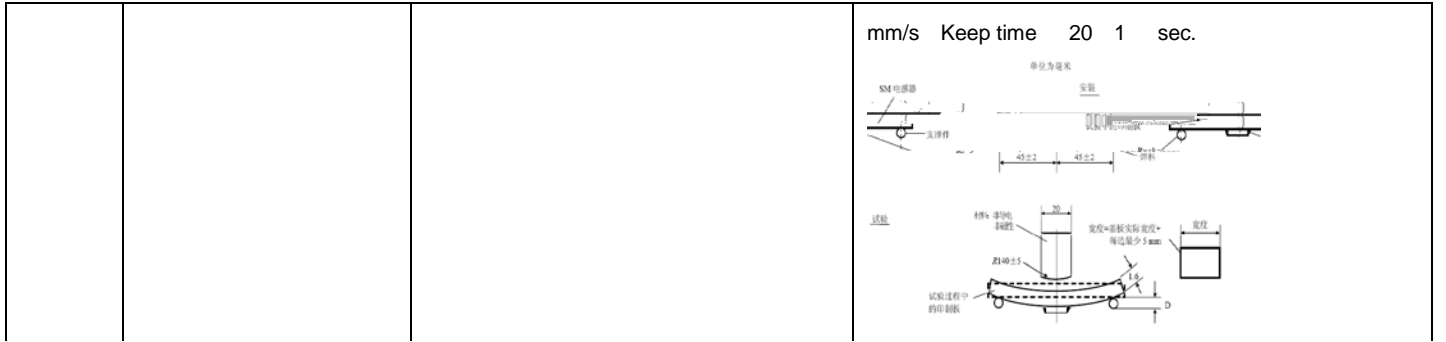
FHW1210HCR68	680@35MHz	10,5,2	45@150MHz	400	1.200	430
FHW1210HCR75	750@35MHz	10,5,2	45@150MHz	380	1.700	400
FHW1210HCR82	820@35MHz	10,5,2	45@150MHz	370	1.820	400
FHW1210HC1R0	1000@35MHz	10,5,2	45@150MHz	340	1.850	320
FHW1210HC1R2	1200@35MHz	10,5	35@150MHz	220	1.870	300
FHW1210HC1R5	1500@7.9MHz	10,5	30@50MHz	160	1.950	310
FHW1210HC1R8	1800@7.9MHz	10,5	30@50MHz	160	2.250	310
FHW1210HC2R2	2200@7.9MHz	10,5	30@50MHz	110	2.410	310
FHW1210HC2R7	2700@7.9MHz	10,5	25@25MHz	100	2.850	300
FHW1210HC3R3	3300@7.9MHz	10,5	20@25MHz	85	3.120	300
FHW1210HC3R9	3900@7.9MHz	10,5	20@25MHz	80	3.600	290
FHW1210HC4R7	4700@7.9MHz	10,5	16@25MHz	60	4.000	280
FHW1210HC5R6	5600@7.9MHz	10,5	20@7.9MHz	60	5.000	250
FHW1210HC6R8	6800@7.9MHz	10,5	20@7.9MHz	55	8.000	230
FHW1210HC8R2	8200@7.9MHz	10,5	20@7.9MHz	50	8.600	170
FHW1210HC100	10000@7.9MHz	10,5	22@7.9MHz	20	6.800	200

**Reliability Test Method**

No.	Items	Requirements	Test Methods and Remarks
1	Solder ability	No visible mechanical damage.  Electrode surface solder coverage. FHW-UC/HC series 90%	245±3                      96.5%Sn/3.0%Ag/0.5%Cu 3±0.3s Dip pads in flux and dip in solder pot(96.5Sn/3.0Ag/0.5Cu)at 245±3 for 3±0.3s.

2                      Resistance to Soldering                      No visible mechanical damage.

5	Low temperature resistance	<p>No visible mechanical damage.</p> <p style="text-align: center;"><math>\pm 5</math></p> <p>Inductance shall not change more than <math>\pm 5\%</math>;</p> <p>Q <math>\pm 10\%</math></p> <p>Q shall not change more than <math>\pm 10\%</math>.</p>	<p>FHW-UC/HC <math>-55 \pm 2</math></p> <p style="text-align: center;"><math>+24</math></p> <p>1000 <math>-0</math> h</p> <p>FHW-UC/HC series shall be subjected to <math>-55 \pm 2</math> for 1000 <math>+24</math> <math>-0</math> h</p>
6	High temperature resistance	<p>No visible mechanical damage.</p> <p style="text-align: center;"><math>\pm 5</math></p> <p>Inductance shall not change more than <math>\pm 5\%</math>;</p> <p>Q <math>\pm 10\%</math></p> <p>Q shall not change more than <math>\pm 10\%</math>.</p>	<p>FHW-UC/HC <math>+125 \pm 5</math></p> <p style="text-align: center;"><math>+24</math></p> <p>1000 <math>-0</math> h</p> <p>FHW-UC/HC series shall be subjected to <math>+125 \pm 5</math> <math>+24</math> for 1000 <math>-0</math> h</p>
7	Temperature Shock	<p>No visible mechanical damage.</p> <p style="text-align: center;"><math>\pm 5</math></p> <p>Inductance shall not change more than <math>\pm 5\%</math>;</p> <p>Q <math>\pm 10\%</math></p> <p>Q shall not change more than <math>\pm 10\%</math>.</p>	<p>FHW-UC/HC <math>+125 \pm 30</math> <math>-40 \pm 30</math></p> <p style="text-align: center;">100</p> <p>FHW-UC/HC series <math>+125 \pm 30</math> minutes <math>-40 \pm 30</math> minutes 100 Cycles.</p>
8	High temperature load	<p>No visible mechanical damage.</p> <p style="text-align: center;"><math>\pm 5</math></p> <p>Inductance shall not change more than <math>\pm 5\%</math>;</p> <p>Q <math>\pm 10\%</math></p> <p>Q shall not change more than <math>\pm 10\%</math>.</p>	<p>FHW-UC/HC <math>125 \pm 2</math></p> <p style="text-align: center;"><math>+24</math></p> <p>1000 <math>-0</math> h</p> <p>FHW-UC/HC series shall be store at <math>125 \pm 2</math> for 1000 <math>+24</math> <math>-0</math> h with rated current applied.</p>



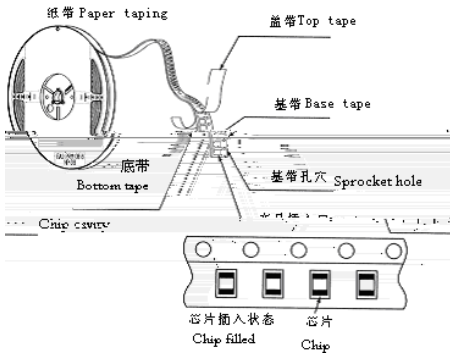
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Solvent Resistance

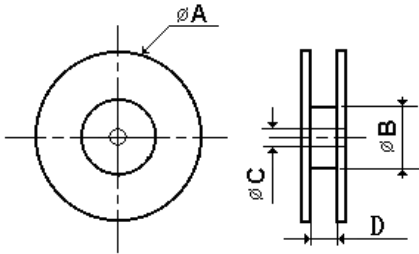


Packaging

\* Taping drawings

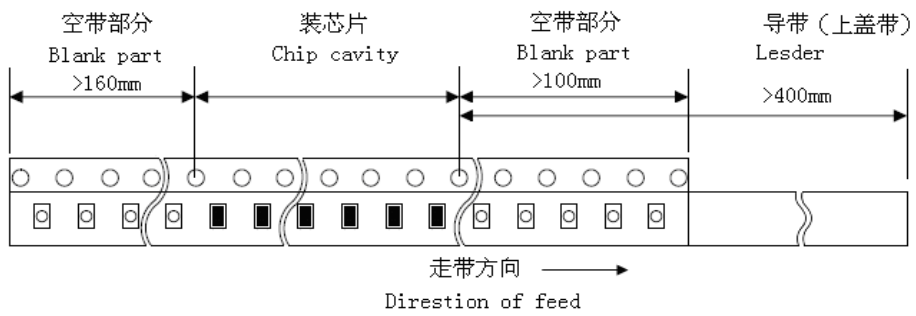


\* Reel dimensions (Unit:mm)



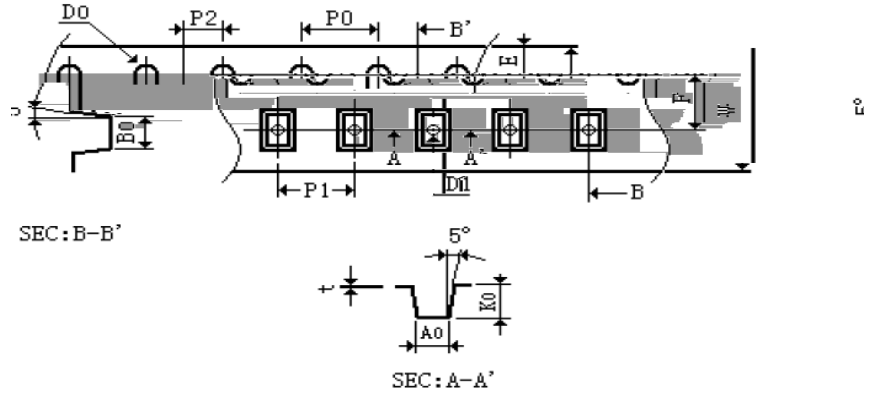
Part NO.	typ.	typ.	typ.	D typ.
0805-1210	178	60	13	8.4

\* Leader and blank portion



\* Taping dimensions (Unit: mm)

EMBOSED tape



Part NO.	W	E	F	D0	D1	P0	P1	P2	P0×10	t	A0	B0	K0
0805	8.00	1.75	3.50	1.55	0.65	4	4	2	40	0.23	1.85	2.45	1.50
1008	8.00	1.75	3.50	1.55	0.65	4	4	2	40	0.25	2.73	2.90	2.34
1210	8.00	1.75	3.50	1.55	0.65	4	4	2	40	0.23	2.96	3.60	2.40

\*

Packaging number (Unit: Pcs )

Size		0805	1008	1210
Per Reel		3000	2000	2000
Per Box	3	6000	6000	15000
	5	10000	10000	25000
Per Case	1.5	30000	30000	75000
	2	40000	40000	100000
	3	60000	60000	150000
	4	80000	80000	200000
	6	120000	120000	300000