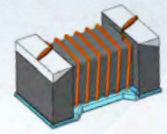


# Wire Wound Ferrite Bead-WHZ-F Series

Operating Temp. : -40°C ~+85°C



## FEATURES

- Small chip suitable for surface mounting
- Large inductance with ferrite material
- Compared with stacked magnetic bead DCR, the loss is smaller

## APPLICATIONS

- Mobile phones and other electronic devices
- Smart wear

## PRODUCT IDENTIFICATION

**WHZ**

**1608**

**F**

**R82**

**□**

**I**

①

②

③

④

⑤

⑥

Type	
WHZ	Wire Wound Ferrite Beads

External Dimensions (L×W) (mm)	
1005[0402]	1.0×0.5
1608[0603]	1.6×0.8

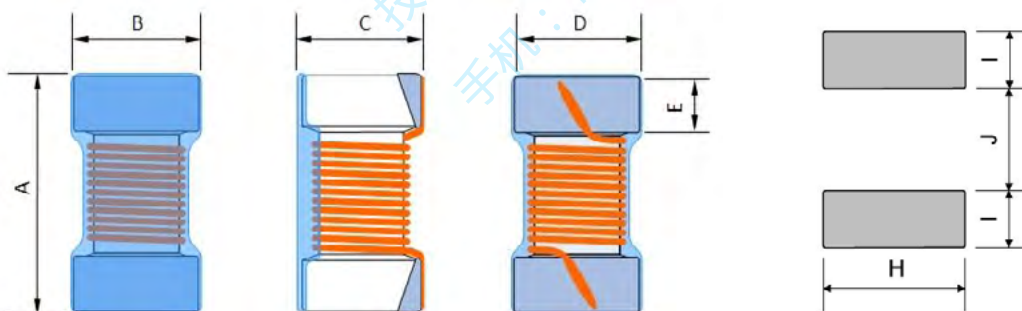
Material Code	
F	Ferrite

Nominal Inductance	
Example	Nominal Value
R82	820nH
100	10000nH

Inductance Tolerance	
J	±5%
K	±10%

Packing	
B	Bulk Package
T	Tape & Reel

## SHAPE AND DIMENSIONS



Unit: mm

Series	A	B	C	D Typ.	E Ref.	H Ref.	I Ref.	J Ref.
WHZ1005F	1.10±0.10	0.60±0.10	0.55±0.10	0.50±0.10	0.20±0.10	0.65	0.35	0.50
WHZ1608F	1.60±0.20	0.80±0.20	0.80±0.20	0.80	0.30	1.02	0.64	0.64

## SPECIFICATION

### WHZ1005F TYPE

Part Number	Inductance	Tolerance	Typ. Impedance		L Test Freq.	Min. Self-resonant Frequency	Max DC Resistance	Max. Rated Current
			100MHz	900MHz				
Units	nH	-	$\Omega$	$\Omega$	MHz	MHz	$\Omega$	mA
Symbol	L	-	Z	Z	Freq.	S.R.F	DCR	I <sub>r</sub>
WHZ1005F20N □ T	20	J, K	11.23	82.23	7.9	2600	0.05	1600
WHZ1005F22N □ T	22	J, K	12.49	94.9	7.9	2500	0.065	1300
WHZ1005F33N □ T	33	J, K	18.91	140.7	7.9	2300	0.06	1400
WHZ1005F36N □ T	36	J, K	20.17	155.8	7.9	2300	0.075	1300
WHZ1005F39N □ T	39	J, K	22.58	171.3	7.9	2200	0.115	830
WHZ1005F51N □ T	51	J, K	28.76	216.5	7.9	1930	0.07	1100
WHZ1005F56N □ T	56	J, K	31.20	237.4	7.9	1900	0.095	1000
WHZ1005F72N □ T	72	J, K	40.27	308.6	7.9	1650	0.1	1000
WHZ1005F78N □ T	78	J, K	44.19	341.6	7.9	1600	0.13	970
WHZ1005FR10 □ T	100	J, K	62.13	508.2	7.9	1400	0.16	900
WHZ1005FR14 □ T	140	J, K	78.73	624.1	7.9	1220	0.26	630
WHZ1005FR18 □ T	180	J, K	99.92	824.7	7.9	1150	0.28	560
WHZ1005FR20 □ T	200	J, K	116.4	1094	7.9	1000	0.44	400
WHZ1005FR22 □ T	220	J, K	126.1	1042	7.9	1150	0.53	380
WHZ1005FR25 □ T	250	K	140.2	1212	7.9	900	0.45	520
WHZ1005FR27 □ T	270	J, K	156.2	1312	7.9	860	0.55	360
WHZ1005FR30 □ T	300	J, K	173.8	1534	7.9	860	0.41	420
WHZ1005FR33 □ T	330	J, K	190.1	1829	7.9	820	0.56	350
WHZ1005FR36 □ T	360	J, K	207	1899	7.9	810	0.575	360
WHZ1005FR39 □ T	390	J, K	222.4	2327	7.9	760	0.75	300
WHZ1005FR42 □ T	420	J, K	245.4	2250	7.9	700	0.7	340
WHZ1005FR47 □ T	470	K	281.5	2659	7.9	650	0.73	310
WHZ1005FR56 □ T	560	J, K	331.3	3593	7.9	600	0.92	200

### WHZ1608F TYPE

Part Number	Inductance	Tolerance	Typ. Impedance		L Test Freq.	Min. Self-resonant Frequency	Max DC Resistance	Max. Rated Current
			100MHz	900MHz				
Units	nH	-	$\Omega$	$\Omega$	MHz	MHz	$\Omega$	mA
Symbol	L	-	Z	Z	Freq.	S.R.F	DCR	I <sub>r</sub>
WHZ1608F47N □ T	47	J, K	28.21	212.9	7.9	1500	0.075	1400
WHZ1608F51N □ T	51	J, K	30.80	200	7.9	1400	0.075	1000
WHZ1608F72N □ T	72	J, K	43.31	330	7.9	1400	0.12	1400
WHZ1608FR10 □ T	100	K	62.75	475.7	7.9	1150	0.13	1400
WHZ1608FR12 □ T	120	J, K	73.71	635.8	7.9	1100	0.15	1400
WHZ1608FR15 □ T	150	K	90.4	719.7	7.9	1050	0.15	1300
WHZ1608FR18 □ T	180	J, K	112.6	910.2	7.9	950	0.15	1300
WHZ1608FR24 □ T	240	J, K	148.5	1716	7.9	800	0.16	950
WHZ1608FR27 □ T	270	J, K	169.7	2235	7.9	775	0.3	710
WHZ1608FR33 □ T	330	J, K	205.8	2038	7.9	725	0.46	560
WHZ1608FR39 □ T	390	J, K	244.0	2813	7.9	620	0.51	500
WHZ1608FR47 □ T	470	J, K	289.4	3447	7.9	540	0.62	420
WHZ1608FR56 □ T	560	J, K	343.2	3529	7.9	525	0.44	550
WHZ1608FR68 □ T	680	J, K	454.8	458.2	7.9	260	0.52	470
WHZ1608FR78 □ T	780	J, K	494.9	3635	7.9	460	0.83	390
WHZ1608FR82 □ T	820	J, K	515.9	3815	7.9	410	0.69	400
WHZ1608F1R0 □ T	1000	J, K	706.2	357	7.9	190	0.81	400
WHZ1608F1R2 □ T	1200	J, K	858.8	169.8	7.9	160	0.87	370
WHZ1608F1R5 □ T	1500	J, K	2222	66.98	7.9	100	0.96	350

# SPECIFICATION

## WHZ1608F TYPE

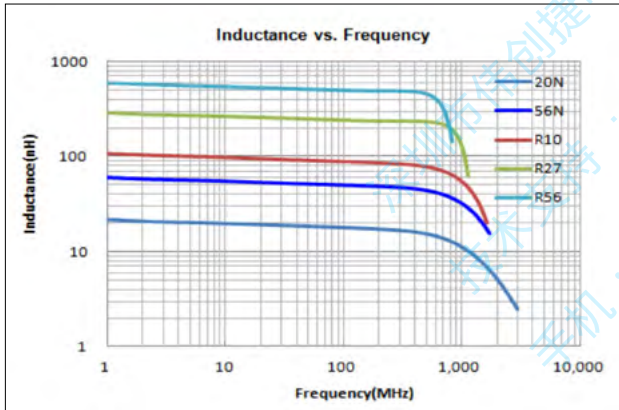
Part Number	Inductance	Tolerance	Typ. Impedance		L Test Freq.	Min. Self-resonant Frequency	Max DC Resistance	Max. Rated Current
			100MHz	900MHz				
Units	nH	-	$\Omega$	$\Omega$	MHz	MHz	$\Omega$	mA
Symbol	L	-	Z	Z	Freq.	S.R.F	DCR	I <sub>r</sub>
WHZ1608F1R8 □ T	1800	J, K	5760	94.58	7.9	80	1.1	350
WHZ1608F2R2 □ T	2200	J, K	3036	32	7.9	68	1.2	320
WHZ1608F2R7 □ T	2700	J, K	1808	32.54	7.9	60	1.5	280
WHZ1608F3R3 □ T	3300	J, K	742.0	27.89	7.9	42	1.5	280
WHZ1608F3R9 □ T	3900	J, K	631.0	72	7.9	40	1.6	280
WHZ1608F4R7 □ T	4700	J, K	573.8	40.75	7.9	34	2.1	260
WHZ1608F5R6 □ T	5600	J, K	516.8	55.83	7.9	32	2.6	240
WHZ1608F6R8 □ T	6800	J, K	648.3	41.4	7.9	31	3.1	200
WHZ1608F7R8 □ T	7800	J, K	457.7	28.32	7.9	28	3.5	200
WHZ1608F8R2 □ T	8200	J, K	640.7	57.50	7.9	26	3.6	190
WHZ1608F100 □ T	10000	J, K	950.8	85.18	2.5	25	4.8	180
WHZ1608F150 □ T	15000	J, K	863.7	56.3	2.5	23	7.1	170
WHZ1608F180 □ T	18000	J, K	746.4	83.67	2.5	22	7.6	160
WHZ1608F220 □ T	22000	J, K	400	15	2.5	15	8.81	130

※ □ : Please specify the inductance tolerance code (J=±5%, K=±10%).

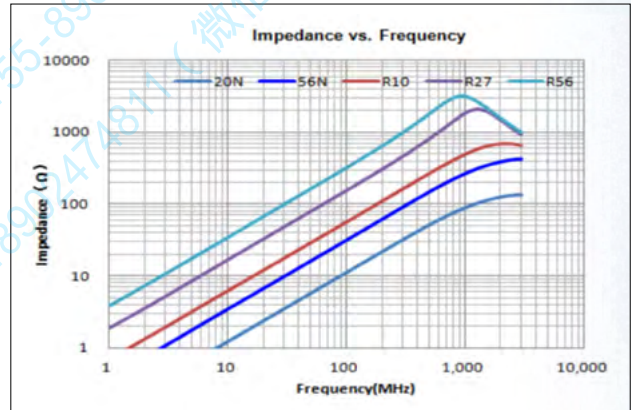
## TYPICAL ELECTRICAL CHARACTERISTICS

### WHZ1005F TYPE

Inductance vs. Frequency Characteristics

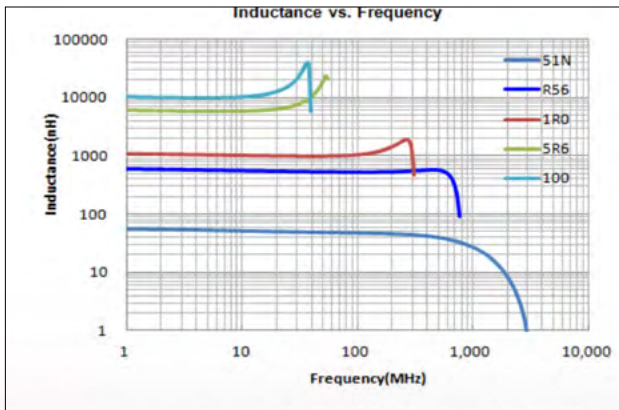


Impedance vs. Frequency Characteristics



### WHZ1608F TYPE

Inductance vs. Frequency Characteristics



Impedance vs. Frequency Characteristics

