

WIRE WOUND INDUCTORS *High Q*

Series HQ - C



FEATURES

- ◆ Especially high Q factor in this series for customer's design.
- ◆ Resin-coated surface enables excellent mounting.
- ◆ Low DC resistance design is ideal for low loss, high output and low power consumption.

APPLICATIONS

- ◆ For high-frequency applications including mobile phones, portable phones, such as PA, ANT, VCO, SAW, etc.
- ◆ Mobile phones such as GSM, CDMA, PDC, etc.
- ◆ Bluetooth, W-LAN

PRODUCT IDENTIFICATION

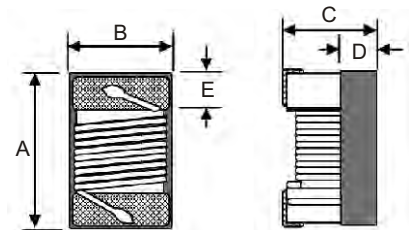
$\frac{HQ}{a} \frac{08}{b} \frac{C}{c} \frac{05}{d} \frac{2}{e} \frac{J}{f} \frac{1U}{g}$

- a : Type of Products - SMD Wire wound inductors for Signal line
 b : Length - 08=2.4mm max. 10=2.9mm max.
 c : Materials - C - Design Code
 d : Width - 05=1.65mm max. 08=2.54mm max.
 e : Packing - PCS/REEL - 2 = 2000, 4 = 4000, K = 2500
 f : Tolerance - G : ±2% J : ±5% K : ±10%
 g : Inductance - 1N2 = 0.0012 μH, 100N = 0.1 μH, 1U = 1.0 μH, 1U2 = 1.2 μH, 1M = 1000 μH, 1M2 = 1200 μH

SHAPES & DIMENSIONS

Unit : mm

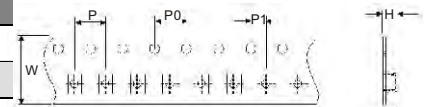
Type	Alias in inch	A (max.)	B (max.)	C (max.)	D (ref.)	E (± 0.1)
HQ08C05	0805	2.40	1.65	1.45	0.65	0.44
HQ10C08	1008	2.90	2.54	2.03	1.30	0.45



TAPE DIMENSIONS

Dimensions in mm

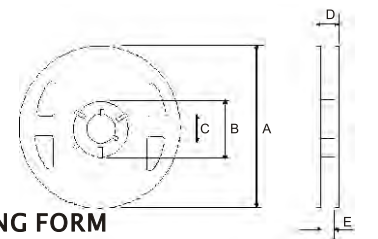
Type	W	P	P ₀	P ₁	H	t
HQ08C05	8	4	4	2	1.4	0.22
HQ10C08	8	4	4	2	2	0.22



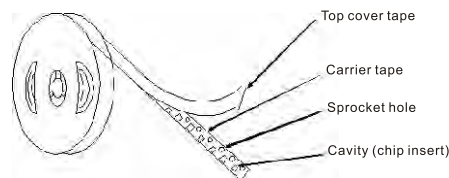
REEL DIMENSIONS

Dimensions in mm

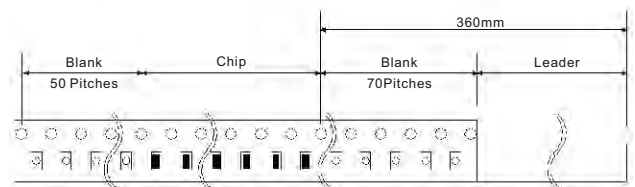
Type	Q'ty/Reel	A	B	C	D	E
HQ08C05	2000 PCS	180	60	13	14.4	8.4
HQ10C08	2000 PCS	180	60	13	14.4	8.4



TAPPING FIGURE



PACKAGING FORM

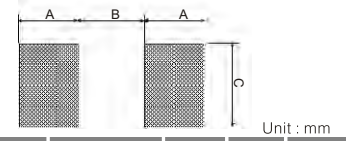


COVER TAPE PEEL STRENGTH

The force for tearing off cover tape is 0.1~0.6(N) in the arrow direction at the following conditions:
 Temperature : 5~35°C
 Humidity : 45~85%
 Atmospheric pressure : 860~1060 hpa



RECOMMENDED PATTERN



Unit : mm

Type	Alias in inch	A	B	C
HQ08C05	0805	1.02	0.76	1.78
HQ10C08	1008	1.02	1.27	2.54

WIRE WOUND INDUCTORS *High Q*

Series **HQ - C**

ELECTRICAL CHARACTERISTICS

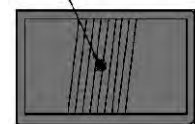
HQ08C05

Part Number	Inductance (nH)/MHz	Inductance tolerance	Q/MHz min.	SRF(MHz) min.	DCR(Ω) max.	Irms(mA) max.	Color Coding
HQ08C052□2N5	2.5/250	J, K	60/1500	>6000	0.030	1600	Black
HQ08C052□5N6	5.6/250	J, K	98/1500	>6000	0.035	1600	Brown
HQ08C052□6N2	6.2/250	J, K	70/1000	4750	0.035	1600	Red
HQ08C052□10N	10/250	J, K	75/1000	3000	0.050	1600	Gray
HQ08C052□12N	12/250	G, J, K	80/1000	3000	0.050	1600	Orange
HQ08C052□15N	15/250	G, J, K	72/500	2950	0.080	1500	White
HQ08C052□16N	16/250	G, J, K	72/500	2950	0.060	1500	Yellow
HQ08C052□18N	18/250	G, J, K	75/500	2550	0.065	1400	Green
HQ08C052□20N	20/250	G, J, K	70/500	2050	0.065	1400	Blue
HQ08C052□22N	22/250	G, J, K	70/500	2050	0.075	1400	Red
HQ08C052□27N	27/250	G, J, K	75/500	2000	0.070	1300	Violet
HQ08C052□30N	30/250	G, J, K	65/500	1950	0.095	1200	Gray
HQ08C052□33N	33/250	G, J, K	65/500	1800	0.100	1200	Orange
HQ08C052□39N	39/250	G, J, K	65/500	1600	0.100	1100	White
HQ08C052□43N	43/200	G, J, K	65/500	1500	0.110	1100	Yellow
HQ08C052□47N	47/200	G, J, K	65/500	1400	0.105	1200	Green
HQ08C052□48N	48/200	G, J, K	65/500	1400	0.100	1200	Black
HQ08C052□51N	51/200	G, J, K	65/500	1400	0.120	1000	Brown
HQ08C052□56N	56/200	J, K	65/500	1400	0.160	900	Blue
HQ08C052□82N	82/200	J, K	65/500	1400	0.200	800	Red
HQ08C052□100N	100/150	J, K	55/500	1300	0.290	700	Black
HQ08C052□120N	120/150	J, K	55/250	1300	0.510	700	Red
HQ08C052□150N	150/100	J, K	55/250	1300	0.540	650	Green
HQ08C052□180N	180/100	J, K	55/250	1300	0.600	600	Gray

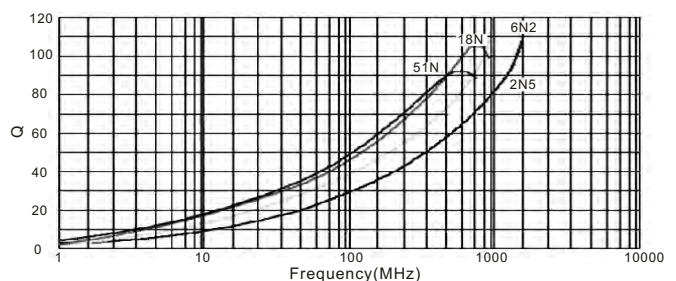
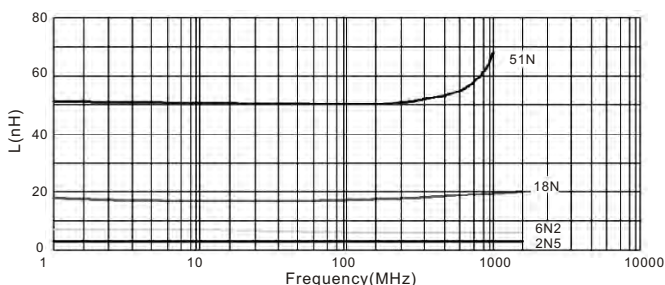
Test Instruments:

- When ordering, please specify tolerance and packaging codes. Ex: HQ08C052J120N
 Tolerance : G = $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$
 Packaging : Clear tape and reel { standard }.
- L, Q : Agilent/HP E4991A+ Agilent/HP16197A
- SRF : Agilent/HP8753D / Agilent/HP E4991A
- Rdc : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.
- Irms for a 15°C rise above 25°C ambient.
- Operating temperature range from -40°C to 125°C.

1st Code



COLOR CODING



WIRE WOUND INDUCTORS *HIGH Q*

Series **HQ - C**

ELECTRICAL CHARACTERISTICS

HQ10C08

Part Number	Inductance (nH)/MHz	Inductance tolerance	Q(MHz) min.	SRF(MHz) min.	DCR(Ω) max.	I _{rms} (mA) max.	Color Coding		
							1st	2nd	3rd
HQ10C082□4N1	4.1/50	J, K	75/1500	6000	0.05	1600	Black	Yellow	Black
HQ10C082□7N1	7.8/50	J, K, T	70/1500	3800	0.05	1600	Black	Violet	Gray
HQ10C082□10N	10/50	J, K	60/500	3600	0.06	1600	Brown	Black	Black
HQ10C082□12N	12/50	J, K	60/500	2800	0.06	1500	Brown	Red	Black
HQ10C082□15N	15/50	J, K	60/500	2700	0.08	1400	Brown	Green	Black
HQ10C082□18N	18/50	J, K, G	62/350	2700	0.07	1400	Brown	Gray	Black
HQ10C082□22N	22/50	J, K, G	62/350	2050	0.07	1400	Red	Red	Black
HQ10C082□27N	27/50	J, K, G	75/350	1700	0.095	1300	Red	Violet	Black
HQ10C082□33N	33/50	J, K, G	75/350	1700	0.09	1300	Orange	Orange	Black
HQ10C082□36N	36/50	J, K, G	75/350	1500	0.12	1300	Orange	Blue	Black
HQ10C082□39N	39/50	J, K, G	75/350	1300	0.09	1300	Orange	White	Black
HQ10C082□47N	47/50	J, K, G	75/350	1450	0.12	1200	Yellow	Violet	Black
HQ10C082□56N	56/50	J, K, G	75/350	1200	0.12	1200	Green	Blue	Black
HQ10C082□68N	68/50	J, K, G	80/350	1150	0.13	1100	Blue	Gray	Black
HQ10C082□82N	82/50	J, K, G	80/350	1060	0.16	1100	Gray	Red	Black
HQ10C082□100N	100/50	J, K, G	62/350	1000	0.18	1000	Brown	Black	Brown
HQ10C082□120N	120/25	J, K, G	50/100	870	0.18	1000	Brown	Red	Brown
HQ10C082□150N	150/25	J, K, G	50/100	850	0.23	1000	Brown	Green	Brown
HQ10C082□180N	180/25	J, K, G	50/100	800	0.3	1000	Brown	Gray	Brown
HQ10C082□220N	220/25	J, K, G	50/100	750	0.35	1000	Red	Red	Brown
HQ10C082□270N	270/25	J, K, G	48/100	630	0.4	900	Red	Violet	Brown
HQ10C082□300N	300/25	J, K, G	48/100	600	0.45	900	Orange	Black	Brown
HQ10C082□330N	330/25	J, K, G	48/100	570	0.47	900	Orange	Orange	Brown
HQ10C082□390N	390/25	J, K, G	48/100	500	0.62	900	Orange	White	Brown
HQ10C082□430N	430/25	J, K, G	48/100	390	0.7	900	Yellow	Orange	Brown
HQ10C082□560N	560/25	J, K, G	48/100	380	1.25	420	Green	Blue	Brown

Test Instruments:

- When ordering, please specify tolerance and packaging codes. Ex: HQ10C082J120N
 Tolerance : G = $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$
 Packaging : Clear tape and reel { standard }.
- L, Q : Agilent/HP E4991A+ Agilent/HP16197A
- SRF : Agilent/HP8753D / Agilent/HP E4991A
- R_{dc} : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.
- I_{rms} for a 15°C rise above 25°C ambient.
- Operating temperature range from -40°C to 125°C.

