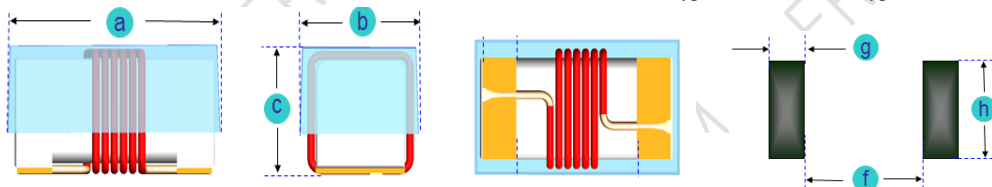


**A. Electrical Specifications:**

P/N	L (nH)	Tol.	L Test Freq. (MHz)	Q Min.	Q Test Freq. (MHz)	SRF Min. (GHz)	DCR Max. (Ω)	I rms. Max.(A)	1 <sup>st</sup> Color	2 <sup>nd</sup> Color	3 <sup>rd</sup> Color
1210C-4N7_	4.7	K, J	100	50	1000	6.00	0.06	0.600	Yellow	Violet	Black
1210C-5N6_	5.6	K, J	100	50	1000	5.50	0.08	0.600	Green	Blue	Black
1210C-10N_	10	K, J, G	100	60	500	4.00	0.06	0.600	Brown	Black	Brown
1210C-12N_	12	K, J, G	100	60	500	3.40	0.06	0.600	Brown	Red	Brown
1210C-15N_	15	K, J, G	100	60	500	3.20	0.06	0.600	Brown	Green	Brown
1210C-18N_	18	K, J, G	100	60	300	2.80	0.06	0.600	Brown	Gray	Brown
1210C-22N_	22	K, J, G	100	60	300	2.30	0.08	0.600	Red	Red	Brown
1210C-27N_	27	K, J, G	100	60	300	2.00	0.08	0.600	Red	Violet	Brown
1210C-33N_	33	K, J, G	100	60	300	1.80	0.08	0.600	Orange	Orange	Brown
1210C-39N_	39	K, J, G	100	60	300	1.80	0.08	0.600	Orange	White	Brown
1210C-47N_	47	K, J, G	100	60	300	1.60	0.08	0.600	Yellow	Violet	Brown
1210C-56N_	56	K, J, G	100	60	300	1.50	0.10	0.600	Green	Blue	Brown
1210C-68N_	68	K, J, G	100	60	300	1.30	0.10	0.600	Blue	Gray	Brown
1210C-82N_	82	K, J, G	100	60	300	1.20	0.10	0.600	Gray	Red	Brown
1210C-91N_	91	K, J, G	100	60	300	1.10	0.10	1.000	White	Brown	Brown
1210C-R10_	100	K, J, G	100	60	300	1.10	0.10	0.500	Brown	Black	Red
1210C-R12_	120	K, J, G	50	60	300	0.90	0.12	0.500	Brown	Red	Red
1210C-R15_	150	K, J, G	50	60	300	0.80	0.18	0.500	Brown	Green	Red
1210C-R18_	180	K, J, G	50	60	300	0.76	0.21	0.500	Brown	Gray	Red
1210C-R22_	220	K, J, G	50	60	300	0.76	0.27	0.500	Red	Red	Red
1210C-R27_	270	K, J, G	50	50	300	0.66	0.33	0.500	Red	Violet	Red
1210C-R33_	330	K, J, G	50	50	100	0.65	0.37	0.500	Orange	Orange	Red
1210C-R36_	360	K, J, G	50	50	100	0.50	0.63	0.600	Orange	Blue	Red
1210C-R39_	390	K, J, G	50	50	100	0.60	0.63	0.500	Orange	White	Red
1210C-R47_	470	K, J, G	50	50	100	0.55	0.69	0.400	Yellow	Violet	Red
1210C-R56_	560	K, J, G	50	50	100	0.47	0.90	0.400	Green	Blue	Red
1210C-R68_	680	K, J, G	25	50	100	0.45	1.05	0.400	Blue	Gray	Red
1210C-R82_	820	K, J, G	25	50	100	0.40	1.45	0.350	Gray	Red	Red
1210C-1R0_	1000	K, J, G	25	45	100	0.34	2.10	0.280	Brown	Black	Orange
1210C-1R2_	1200	K, J, G	7.96	45	50	0.32	2.40	0.250	Brown	Red	Orange
1210C-1R5_	1500	K, J, G	7.96	45	50	0.30	2.70	0.220	Brown	Green	Orange
1210C-1R8_	1800	K, J, G	7.96	45	50	0.28	3.50	0.180	Brown	Gray	Orange
1210C-2R2_	2200	K, J, G	7.96	45	50	0.26	3.80	0.150	Red	Red	Orange
1210C-3R3_	3300	K, J, G	7.96	25	25	0.14	10	0.050	Orange	Orange	Orange

**B. Dimensions: mm (Inch)**

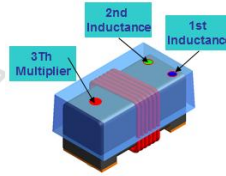
Series	a	b	c	f	g	h
1210C	3.42 (0.135)	2.8 (0.110)	2.3 (0.091)	2.3 (0.091)	1.02 (0.040)	2.2 (0.087)
Tol.	Max.	Max.	Max.	Typ.	Typ.	Typ.



**C. Color coding:**

- Parts are marked with 3 color dots. The table below shows the significance of each color.
- Dots 1 and 2 indicate the inductance in nano-Henries.
- Dot 3 indicates number of zeroes to be added.

<b>0 = Black</b>	<b>5 = Green</b>
<b>1 = Brown</b>	<b>6 = Blue</b>
<b>2 = Red</b>	<b>7 = Violet</b>
<b>3 = Orange</b>	<b>8 = Gray</b>
<b>4 = Yellow</b>	<b>9 = White</b>



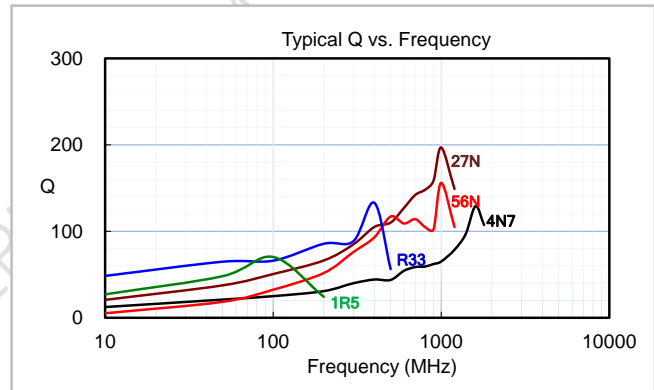
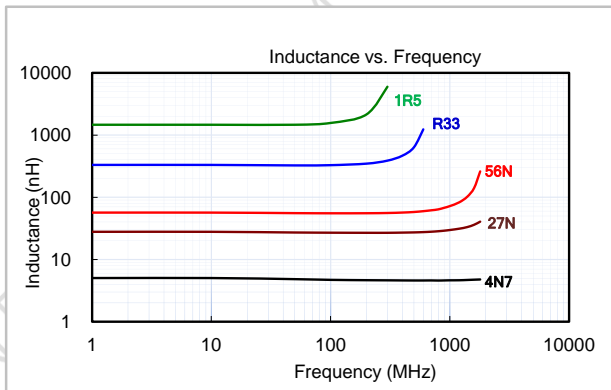
**D. General Information:**

- 1210C-xxx\_: “1210C” = Size Type, “C” = Gold Plated pad, “xxx” = Inductance, “\_” = Tolerance.
- Tolerance “\_”: K: ± 10%, J: ± 5%, G: ± 2%.
- Product material: Ceramic.
- Small and lightweight surface mounting type.
- High Q at high frequency & High self-resonance frequency.
- For 15°C Temperature Rise at 25°C ambient.
- Inductance & Q measured with HP4291B Impedance Analyzer.
- SRF measured using the HP8720D or HP8753E Network Analyzer.
- DCR measured using the 16502 milliohm meter.
- Operating temperature: -40°C to +125°C.
- This series has no color code due to the size is small.
- Inductance and Current Range: From 10 nH (1.0 A) to 4700 nH (0.26 A)
- SRF: From 0.09 GHz to 4.1 GHz
- For 15°C Temperature Rise at 25°C ambient
- MSL: Level 1.

**E. Applications:**

- Game Consoles
- Set Top Boxes
- Cables Modems
- Computers
- Mobile Communication Devices (Cell Phones, Radios, etc.)
- RF Filters

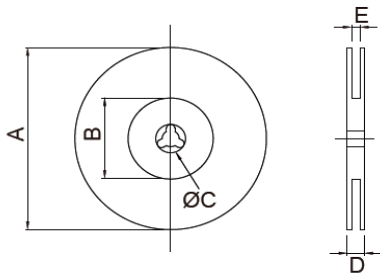
**F. Characteristics Curve:**



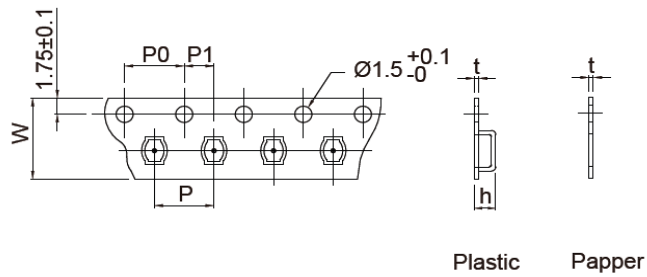
**G. Supplementary Information:**

- Packaging Information

CARRIER TAPE REELS



TAPE DIMENSIONS (mm)



Series P/N	Reel dimensions (mm)					Tape dimensions (mm)						Parts per reel		Quantity per	
	A	B	C	D	E	W	P	P0	P1	h	t	7"	13"	Box	Carton
1210C	180	75	13	12.5	8.5	8	4	4	2	2.43	0.23	1,500	---	7,500	45,000

2. RoHS Reflow Solder Profile

**Typical RoHS Reflow Profile**

