

CS Series



Due to accurate wire winding technology, these chip inductors are designed for filtering, impedance matching, resonance and choke circuits for RF designer. Both standard series custom designs are available.

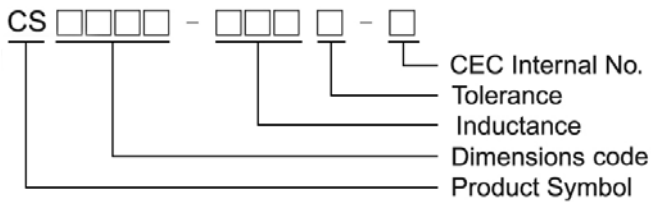
**Features**

- RoHS Compliant
- Ceramic body and wire wound construction provide high SRFs
- Exceptional Q values even at high frequencies
- Highest possible SRFs as well as excellent Q values
- The non-magnetic coil form assures utmost thermal stability, predictability and batch consistency
- CS series is standard for RF designers

**Applications**

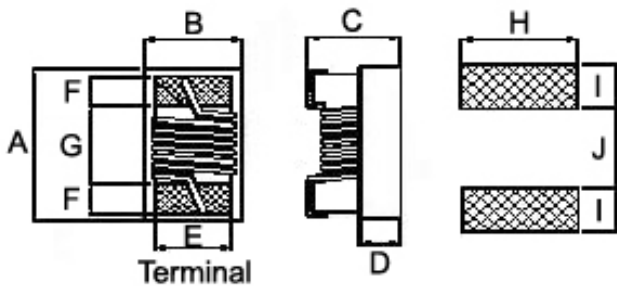
- RF products for cellular phone
- GPS receiver
- Base Station
- Repeater
- Wireless LAN/ mouse/ keyboard/ earphone
- Remote control
- Security system and other RF modules

**Product Identification**

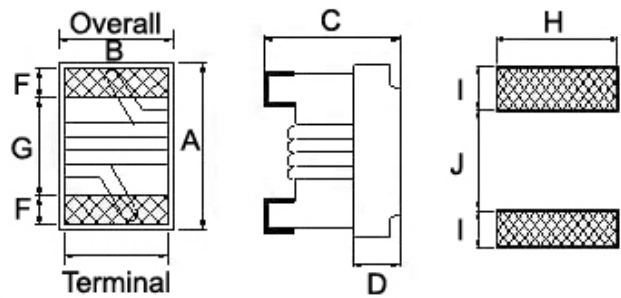


**Shape and Dimensions / Recommended Pattern**

**CS0402**



**CS0603/0805/1008**



Dimensions

		A Max	B Max	C Max	D	E	F	G	H	I	J
<b>CS0402</b>	inch	0.047	0.028	0.026	0.010	0.020	0.009	0.022	0.026	0.014	0.018
	mm	1.19	0.70	0.66	0.25	0.51	0.23	0.56	0.66	0.36	0.46
<b>CS0805</b>	inch	0.093	0.068	0.06	0.028	0.050	0.020	0.040	0.070	0.040	0.030
	mm	2.35	1.73	1.52	0.71	1.27	0.51	1.02	1.78	1.02	0.76
<b>CS1008</b>	inch	0.115	0.110	0.083	0.046	0.080	0.020	0.060	0.100	0.040	0.050
	mm	2.92	2.79	2.1	1.16	2.03	0.51	1.52	2.54	1.02	1.27
		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>
<b>CS0603</b>	mm	1.6 <sup>+0.2</sup> <sub>-0.1</sub>	1.02±0.1	0.82 <sup>+0.2</sup> <sub>-0.1</sub>	0.51	0.76	0.33	0.86	1.02	0.64	0.64

## Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Q Min	900MHz		1.7GHz		SRF (GHz) Min	Rdc (Ω) Max	I <sub>rms</sub> (mA) Max
				L Typ.	Q Typ.	L Typ.	Q Typ.			
CS0402-1N0□-S	1.0	10 / 5	16	1.02	77	1.02	69	12.70	0.045	1360
CS0402-1N9□-S	1.9	10 / 5	16	1.72	68	1.74	82	11.30	0.070	1040
CS0402-2N0□-S	2.0	10 / 5	16	1.93	54	1.93	75	11.10	0.070	1040
CS0402-2N2□-S	2.2	10 / 5	19	2.19	59	2.23	100	10.80	0.070	960
CS0402-2N4□-S	2.4	10 / 5	15	2.24	51	2.27	68	10.50	0.068	790
CS0402-2N7□-S	2.7	10 / 5	16	2.58	42	2.60	61	10.40	0.120	640
CS0402-3N3□-S	3.3	10 / 5	19	3.10	65	3.12	87	7.00	0.066	840
CS0402-3N6□-S	3.6	10 / 5	19	3.56	45	3.62	71	6.80	0.066	840
CS0402-3N9□-S	3.9	10 / 5	19	3.89	50	4.00	75	6.00	0.066	840
CS0402-4N3□-S	4.3	10 / 5	18	4.19	47	4.30	71	6.00	0.091	700
CS0402-4N7□-S	4.7	10 / 5	15	4.55	48	4.68	68	4.77	0.130	640
CS0402-5N1□-S	5.1	10 / 5	20	5.15	56	5.25	82	4.80	0.083	800
CS0402-5N6□-S	5.6	10 / 5	20	5.16	54	5.28	81	4.80	0.083	760
CS0402-6N2□-S	6.2	10 / 5	20	6.16	52	6.37	76	4.80	0.083	760
CS0402-6N8□-S	6.8	10 / 5	20	6.56	63	6.93	78	4.80	0.083	680
CS0402-7N5□-S	7.5	10 / 5	22	7.91	60	8.22	88	4.80	0.10	680
CS0402-8N2□-S	8.2	10 / 5	22	8.50	57	8.85	84	4.40	0.10	680
CS0402-8N7□-S	8.7	10 / 5	18	8.78	54	9.21	73	4.10	0.20	480
CS0402-9N0□-S	9.0	10 / 5	22	9.07	62	9.53	78	4.16	0.10	680
CS0402-9N5□-S	9.5	10 / 5	18	9.42	54	9.98	69	4.00	0.20	480
CS0402-10N□-S	10	10 / 5	21	9.8	50	10.10	67	3.90	0.20	480
CS0402-11N□-S	11	10 / 5	24	10.7	52	11.20	78	3.68	0.12	640
CS0402-12N□-S	12	10 / 5	24	11.9	53	12.70	71	3.60	0.12	640
CS0402-13N□-S	13	10 / 5	24	13.4	51	14.63	57	3.45	0.21	440
CS0402-15N□-S	15	10 / 5	24	14.6	55	15.50	77	3.28	0.17	560
CS0402-16N□-S	16	10 / 5	24	16.6	46	18.86	47	3.10	0.22	560
CS0402-18N□-S	18	10 / 5	25	18.3	57	20.28	62	3.10	0.23	420
CS0402-19N□-S	19	10 / 5	24	19.1	50	21.10	67	3.04	0.20	480
CS0402-20N□-S	20	10 / 5	25	20.7	52	23.66	53	3.00	0.25	420
CS0402-22N□-S	22	10 / 5	25	23.2	53	26.75	53	2.80	0.30	400
CS0402-23N□-S	23	10 / 5	22	23.8	49	26.90	64	2.72	0.30	400
CS0402-24N□-S	24	10 / 5	25	25.1	51	29.50	50	2.70	0.30	400
CS0402-27N□-S	27	10 / 5	24	28.7	49	33.50	63	2.48	0.30	400
CS0402-30N□-S	30	10 / 5	25	31.1	46	38.50	39	2.35	0.35	400
CS0402-33N□-S	33	10 / 5	24	34.9	31	41.74	32	2.35	0.40	400
CS0402-36N□-S	36	10 / 5	24	39.5	44	48.40	53	2.32	0.44	320
CS0402-39N□-S	39	10 / 5	25	41.7	47	50.23	45	2.10	0.55	200
CS0402-40N□-S	40	10 / 5	24	39.0	44	47.40	33	2.24	0.65	320
CS0402-43N□-S	43	10 / 5	25	45.8	46	61.55	34	2.03	0.81	100
CS0402-47N□-S	47	10 / 5	20	50.0	38	-	-	2.10	0.83	150
CS0402-51N□-S	51	10 / 5	25	56.6	40	-	-	1.75	0.82	100
CS0402-56N□-S	56	10 / 5	22	62.8	42	-	-	1.76	0.97	100
CS0402-68N□-S	68	10 / 5	22	78.2	36	-	-	1.62	1.12	100
CS0402-82N□-S	82	10 / 5	20	-	-	-	-	1.26	1.55	50
CS0402-R10□-S	100	10 / 5	20	-	-	-	-	1.16	2.00	30

- When ordering, please specify tolerance and packaging codes.
- Tolerance : J = ±5% , K = ±10%
- L , Q : Agilent E4991A+AgilentHP16197A @250MHz
- SRF : Agilent/HP8753D / Agilent/HP8722ES
- Rdc : HP4287A
- I<sub>rms</sub> for a 15°C rise above 25°C ambient.

## Electrical Characteristics

Part Number	Inductance (nH)	Test Frequency (MHz)	Tolerance (±%)	Q Min	SRF (MHz) Min	Rdc (Ω) Max	Irms (mA) Max	900 MHz		1.7 GHz		Color
								L Typ.	Q Typ.	L Typ.	Q Typ.	
CS0603-1N6□-S	1.6	250	10 / 5	24	12500	0.030	700	1.67	49	1.65	63	Red
CS0603-1N8□-S	1.8	250	10 / 5	16	12500	0.045	700	1.63	35	1.66	50	Black
CS0603-3N6□-S	3.6	250	10 / 5	22	5900	0.063	700	3.72	53	3.71	65	Red
CS0603-3N9□-S	3.9	250	10 / 5	22	6900	0.080	700	3.95	49	3.96	67	Brown
CS0603-4N3□-S	4.3	250	10 / 5	22	5900	0.063	700	4.32	50	4.33	70	Orange
CS0603-4N7□-S	4.7	250	10 / 5	20	5800	0.116	700	4.72	47	4.75	57	Violet
CS0603-5N1□-S	5.1	250	10 / 5	20	5700	0.140	700	4.93	47	4.95	56	Green
CS0603-5N6□-S	5.6	250	10 / 5	20	5800	0.170	700	5.53	56	5.86	77	Yellow
CS0603-6N3□-S	6.3	250	10 / 5	20	5700	0.140	700	5.50	47	6.10	60	White
CS0603-6N8□-S	6.8	250	10 / 5	27	5800	0.110	700	6.75	60	7.10	81	Red
CS0603-7N5□-S	7.5	250	10 / 5	28	4800	0.106	700	7.70	60	7.82	65	Brown
CS0603-8N2□-S	8.2	250	10 / 5	28	4700	0.109	700	8.30	60	8.50	60	White
CS0603-8N7□-S	8.7	250	10 / 5	28	4600	0.109	700	8.86	62	9.32	58	Yellow
CS0603-9N5□-S	9.5	250	10 / 5	28	5400	0.135	700	9.70	59	9.92	61	Blue
CS0603-10N□-S	10	250	10 / 5 / 2	31	4800	0.130	700	10.0	66	10.6	83	Orange
CS0603-11N□-S	11	250	10 / 5 / 2	33	4000	0.086	700	11.0	53	11.5	56	Gray
CS0603-12N□-S	12	250	10 / 5 / 2	35	4000	0.130	700	12.3	72	13.5	83	Yellow
CS0603-15N□-S	15	250	10 / 5 / 2	35	4000	0.170	700	15.4	64	16.8	89	Green
CS0603-16N□-S	16	250	10 / 5 / 2	34	3300	0.104	700	16.2	55	17.3	52	White
CS0603-18N□-S	18	250	10 / 5 / 2	35	3100	0.170	700	18.7	70	21.4	69	Blue
CS0603-22N□-S	22	250	10 / 5 / 2	38	3000	0.190	700	22.8	73	26.1	71	Violet
CS0603-24N□-S	24	250	10 / 5 / 2	37	2650	0.135	700	24.5	45	28.7	39	Black
CS0603-27N□-S	27	250	10 / 5 / 2	40	2800	0.220	600	29.2	74	34.6	65	Gray
CS0603-30N□-S	30	250	10 / 5 / 2	37	2250	0.144	600	31.4	47	39.9	28	Brown
CS0603-33N□-S	33	250	10 / 5 / 2	40	2300	0.220	600	36	67	49.5	42	White
CS0603-36N□-S	36	250	10 / 5 / 2	38	2080	0.250	600	39.4	47	52.7	24	Red
CS0603-39N□-S	39	250	10 / 5 / 2	40	2200	0.250	600	42.7	60	60.2	40	Black
CS0603-43N□-S	43	250	10 / 5 / 2	39	2000	0.280	600	47	44	64.9	21	Orange
CS0603-47N□-S	47	200	10 / 5 / 2	38	2000	0.280	600	52.2	62	77.2	35	Brown
CS0603-56N□-S	56	200	10 / 5 / 2	38	1900	0.310	600	62.5	56	97	26	Red
CS0603-68N□-S	68	200	10 / 5 / 2	37	1700	0.340	600	80.5	54	168	21	Orange
CS0603-72N□-S	72	150	10 / 5 / 2	34	1700	0.490	400	82	53	135	20	Yellow
CS0603-82N□-S	82	150	10 / 5 / 2	34	1700	0.540	400	96.2	54	177	21	Green
CS0603-R10□-S	100	150	10 / 5 / 2	34	1400	0.580	400	124	49	-	-	Blue
CS0603-R11□-S	110	150	10 / 5 / 2	32	1350	0.610	300	138	43	-	-	Violet
CS0603-R12□-S	120	150	10 / 5 / 2	32	1300	0.750	300	166	39	-	-	Gray
CS0603-R15□-S	150	150	10 / 5 / 2	28	990	0.920	280	250	25	-	-	White
CS0603-R18□-S	180	100	10 / 5 / 2	25	990	1.250	240	305	22	-	-	Black
CS0603-R22□-S	220	100	10 / 5 / 2	25	900	2.100	200	-	-	-	-	Brown
CS0603-R27□-S	270	100	10 / 5 / 2	24	900	2.800	170	-	-	-	-	Red
CS0603-R33□-S	330	100	10 / 5 / 2	25	900	3.890	100	-	-	-	-	Orange
CS0603-R39□-S	390	100	10 / 5 / 2	25	900	4.350	100	-	-	-	-	Yellow

- When ordering, please specify tolerance and packaging codes.
- Tolerance : G = ±2% , J = ±5% , K = ±10%
- Packaging: Clear tape and reel {standard}.
- L /Q: Agilent E4991A + AgilentHP16197A
- SRF: HP8753D/ HP4291A
- RDC: CH502BC/ HP4338B
- I rms for a 15°C rise above 25°C ambient.
- Operating temperature range from -40°C to 125°C. (Including self - temperature rise)

## Electrical Characteristics

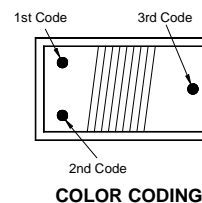
Part Number	Inductance (nH)	Test Frequency (MHz)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	Rdc (Ω) Max	Irms (mA) Max	Color
CS0805-2N8□-S	2.8	250	10 / 5	80	1500	7900	0.06	800	Gray
CS0805-3N0□-S	3.0	250	10 / 5	65	1500	7900	0.06	800	White
CS0805-3N3□-S	3.3	250	10 / 5	50	1500	7900	0.08	600	Black
CS0805-5N6□-S	5.6	250	10 / 5	65	1000	5500	0.08	600	Orange
CS0805-6N8□-S	6.8	250	10 / 5	50	1000	5500	0.11	600	Brown
CS0805-7N5□-S	7.5	250	10 / 5	50	1000	4500	0.14	600	Green
CS0805-8N2□-S	8.2	250	10 / 5	50	1000	4700	0.12	600	Red
CS0805-10N□-S	10	250	10 / 5 / 2	60	500	4200	0.10	600	Blue
CS0805-12N□-S	12	250	10 / 5 / 2	50	500	4000	0.15	600	Orange
CS0805-15N□-S	15	250	10 / 5 / 2	50	500	3400	0.17	600	Yellow
CS0805-18N□-S	18	250	10 / 5 / 2	50	500	3300	0.20	600	Green
CS0805-22N□-S	22	250	10 / 5 / 2	55	500	2600	0.22	500	Blue
CS0805-24N□-S	24	250	10 / 5 / 2	50	500	2000	0.22	500	Gray
CS0805-27N□-S	27	250	10 / 5 / 2	55	500	2500	0.25	500	Violet
CS0805-33N□-S	33	250	10 / 5 / 2	60	500	2050	0.27	500	Gray
CS0805-36N□-S	36	250	10 / 5 / 2	55	500	1700	0.27	500	Orange
CS0805-39N□-S	39	250	10 / 5 / 2	60	500	2000	0.29	500	White
CS0805-43N□-S	43	200	10 / 5 / 2	60	500	1650	0.34	500	Yellow
CS0805-47N□-S	47	200	10 / 5 / 2	60	500	1650	0.31	500	Black
CS0805-56N□-S	56	200	10 / 5 / 2	60	500	1550	0.34	500	Brown
CS0805-68N□-S	68	200	10 / 5 / 2	60	500	1450	0.38	500	Red
CS0805-82N□-S	82	150	10 / 5 / 2	65	500	1300	0.42	400	Orange
CS0805-91N□-S	91	150	10 / 5 / 2	65	500	1200	0.48	400	Black
CS0805-R10□-S	100	150	10 / 5 / 2	65	500	1200	0.46	400	Yellow
CS0805-R11□-S	110	150	10 / 5 / 2	50	250	1000	0.48	400	Brown
CS0805-R12□-S	120	150	10 / 5 / 2	50	250	1100	0.51	400	Green
CS0805-R15□-S	150	100	10 / 5 / 2	50	250	920	0.56	400	Blue
CS0805-R18□-S	180	100	10 / 5 / 2	50	250	870	0.64	400	Violet
CS0805-R20□-S	200	100	10 / 5 / 2	50	250	860	0.68	400	Red
CS0805-R22□-S	220	100	10 / 5 / 2	50	250	850	0.70	400	Gray
CS0805-R24□-S	240	100	10 / 5 / 2	44	250	690	1.00	350	Red
CS0805-R25□-S	250	100	10 / 5 / 2	45	250	660	1.20	350	Yellow
CS0805-R27□-S	270	100	10 / 5 / 2	48	250	650	1.00	350	White
CS0805-R33□-S	330	100	10 / 5 / 2	48	250	600	1.40	310	Black
CS0805-R39□-S	390	100	10 / 5 / 2	48	250	560	1.50	290	Brown
CS0805-R47□-S	470	50	10 / 5 / 2	33	100	375	1.76	250	Violet
CS0805-R56□-S	560	25	10 / 5 / 2	23	50	340	1.90	230	Orange
CS0805-R62□-S	620	25	10 / 5 / 2	23	50	220	2.20	210	Yellow
CS0805-R68□-S	680	25	10 / 5 / 2	23	50	188	2.20	190	Green
CS0805-R82□-S	820	25	10 / 5 / 2	23	50	215	2.35	180	Blue
CS0805-1R0□-S	1000	25	10 / 5 / 2	20	50	100	2.50	170	Gray
CS0805-1R2□-S	1200	7.9	10 / 5 / 2	18	25	100	2.50	170	White

- When ordering, please specify tolerance and packaging codes.
- Tolerance : G = ±2% , J = ±5% , K = ±10%
- L/Q: Agilent E4991A +AgilentHP16197A
- SRF: Agilent/HP8753D / Agilent/HP4291A
- RDC: CH502BC/ HP4338B
- I rms for a 15°C rise above 25°C ambient.
- Operating temperature range from -40°C to 125°C. (Including self - temperature rise)

## Electrical Characteristics

Part Number	Inductance (nH)	Test Frequency (MHz)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	Rdc (Ω) Max	I <sub>rms</sub> (mA) Max	Color Coding		
									1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>
CS1008-10N□-S	10	50	10 / 5 / 2	50	500	4100	0.08	1000	Brown	Black	Black
CS1008-12N□-S	12	50	10 / 5 / 2	50	500	3300	0.09	1000	Brown	Red	Black
CS1008-15N□-S	15	50	10 / 5 / 2	50	500	2500	0.10	1000	Brown	Green	Black
CS1008-18N□-S	18	50	10 / 5 / 2	50	350	2500	0.11	1000	Brown	Gray	Black
CS1008-22N□-S	22	50	10 / 5 / 2	55	350	2400	0.12	1000	Red	Red	Black
CS1008-27N□-S	27	50	10 / 5 / 2	55	350	1600	0.13	1000	Red	Violet	Black
CS1008-33N□-S	33	50	10 / 5 / 2	60	350	1600	0.14	1000	Orange	Orange	Black
CS1008-39N□-S	39	50	10 / 5 / 2	60	350	1500	0.15	1000	Orange	White	Black
CS1008-47N□-S	47	50	10 / 5 / 2	65	350	1500	0.16	1000	Yellow	Violet	Black
CS1008-56N□-S	56	50	10 / 5 / 2	65	350	1300	0.18	1000	Green	Blue	Black
CS1008-68N□-S	68	50	10 / 5 / 2	65	350	1300	0.20	1000	Blue	Gray	Black
CS1008-82N□-S	82	50	10 / 5 / 2	60	350	1000	0.22	1000	Gray	Red	Black
CS1008-R10□-S	100	25	10 / 5 / 2	60	350	1000	0.56	650	Brown	Black	Brown
CS1008-R12□-S	120	25	10 / 5 / 2	60	350	950	0.63	650	Brown	Red	Brown
CS1008-R15□-S	150	25	10 / 5 / 2	45	100	850	0.70	580	Brown	Green	Brown
CS1008-R18□-S	180	25	10 / 5 / 2	45	100	750	0.77	620	Brown	Gray	Brown
CS1008-R22□-S	220	25	10 / 5 / 2	45	100	700	0.84	500	Red	Red	Brown
CS1008-R27□-S	270	25	10 / 5 / 2	45	100	600	0.91	500	Red	Violet	Brown
CS1008-R33□-S	330	25	10 / 5 / 2	45	100	570	1.05	450	Orange	Orange	Brown
CS1008-R39□-S	390	25	10 / 5 / 2	45	100	500	1.12	470	Orange	White	Brown
CS1008-R47□-S	470	25	10 / 5 / 2	45	100	450	1.19	470	Yellow	Violet	Brown
CS1008-R56□-S	560	25	10 / 5 / 2	45	100	415	1.33	400	Green	Blue	Brown
CS1008-R62□-S	620	25	10 / 5 / 2	45	100	375	1.40	300	Blue	Red	Brown
CS1008-R68□-S	680	25	10 / 5 / 2	45	100	375	1.47	400	Blue	Gray	Brown
CS1008-R75□-S	750	25	10 / 5 / 2	45	100	360	1.54	360	Violet	Green	Brown
CS1008-R82□-S	820	25	10 / 5 / 2	45	100	350	1.61	400	Gray	Red	Brown
CS1008-R91□-S	910	25	10 / 5 / 2	35	50	320	1.68	380	White	Brown	Brown
CS1008-1R0□-S	1000	25	10 / 5 / 2	35	50	290	1.75	370	Brown	Black	Red
CS1008-1R2□-S	1200	7.9	10 / 5 / 2	35	50	250	2.0	310	Brown	Red	Red
CS1008-1R5□-S	1500	7.9	10 / 5 / 2	28	50	200	2.3	330	Brown	Green	Red
CS1008-1R8□-S	1800	7.9	10 / 5 / 2	28	50	160	2.6	300	Brown	Gray	Red
CS1008-2R2□-S	2200	7.9	10 / 5 / 2	28	50	160	2.8	280	Red	Red	Red
CS1008-2R7□-S	2700	7.9	10 / 5 / 2	22	25	140	3.2	290	Red	Violet	Red
CS1008-3R3□-S	3300	7.9	10 / 5 / 2	22	25	110	3.4	290	Orange	Orange	Red
CS1008-3R9□-S	3900	7.9	10 / 5 / 2	20	25	100	3.6	260	Orange	White	Red
CS1008-4R7□-S	4700	7.9	10 / 5 / 2	20	25	90	4.0	260	Yellow	Violet	Red
CS1008-5R6□-S	5600	7.9	10 / 5 / 2	18	7.9	45	4.0	240	Green	Blue	Red
CS1008-6R8□-S	6800	7.9	10 / 5 / 2	18	7.9	40	4.9	200	Blue	Gray	Red
CS1008-8R2□-S	8200	7.9	10 / 5 / 2	18	7.9	25	6.0	170	Gray	Red	Red
CS1008-100□-S	10000	2.52	10 / 5 / 2	18	7.9	25	8.0	150	Brown	Black	Orange

- When ordering, please specify tolerance and packaging codes
- Tolerance : G = ±2% , J = ±5% , K = ±10%
- Packaging: Clear tape and reel {standard}
- L/Q: Agilent E4991A + AgilentHP16197A
- SRF: Agilent/HP8753D / Agilent/HP4291A
- RDC: CH502BC/ HP4338B
- I<sub>rms</sub> for a 15°C rise above 25°C ambient
- Operating temperature range from -40°C to 125°C. (Including self - temperature rise)
- Inductance would be correct Chilisin standard piece

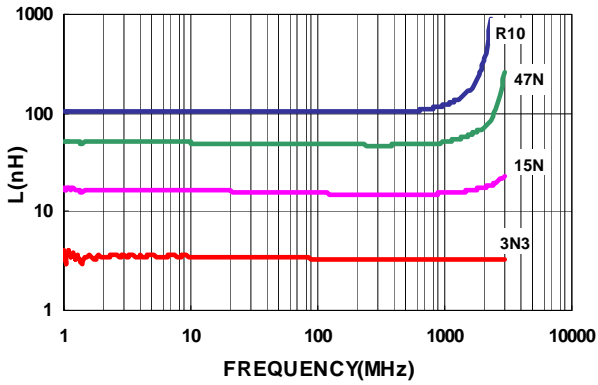


# SMD Wire Wound Ceramic Chip Inductors - CS Series

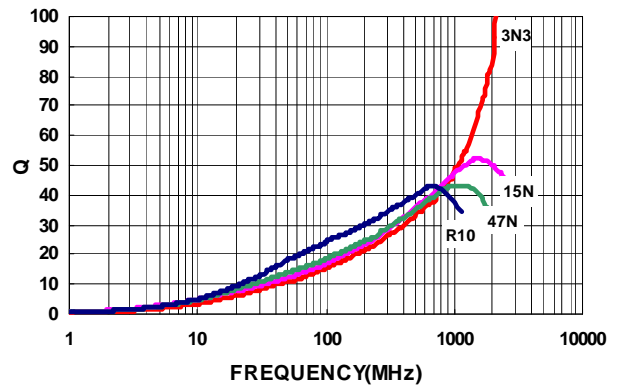
Test Instruments : Agilent E4991A Material/Impedance Analyzer

## CS0402

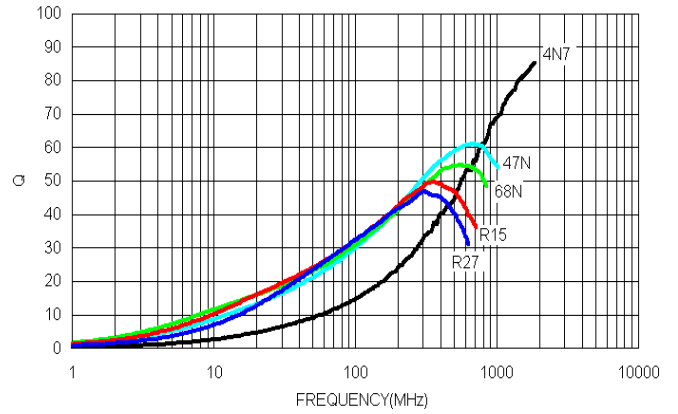
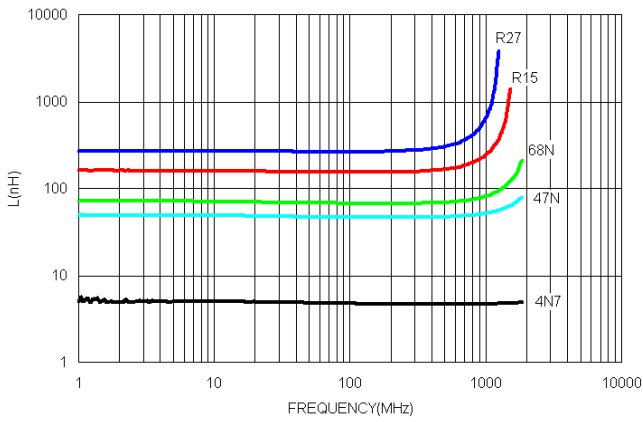
Typical **L** vs. **F** Frequency



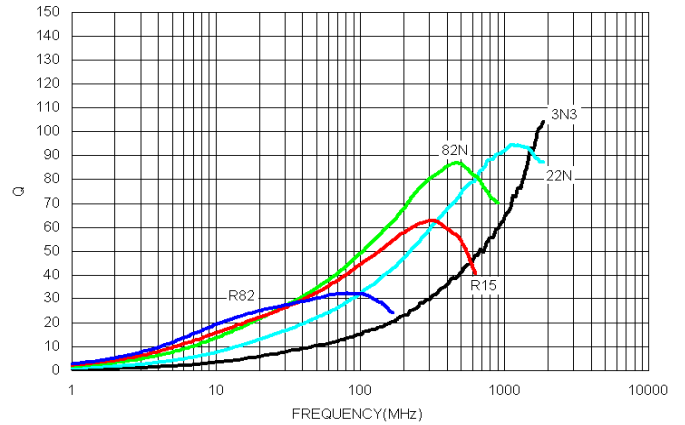
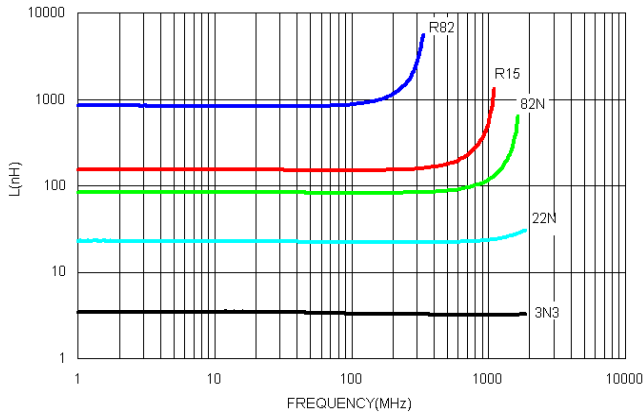
Typical **Q** vs. **F** Frequency



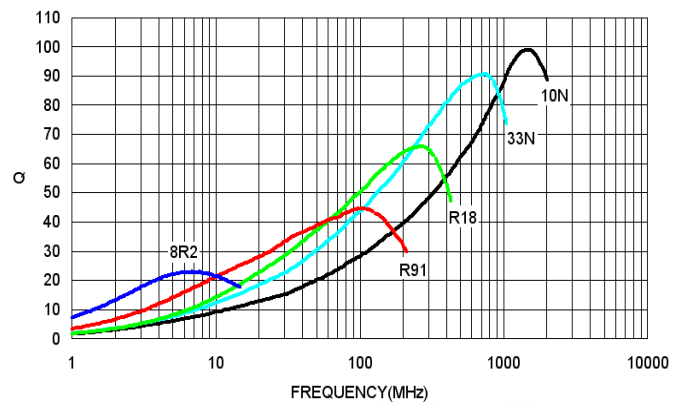
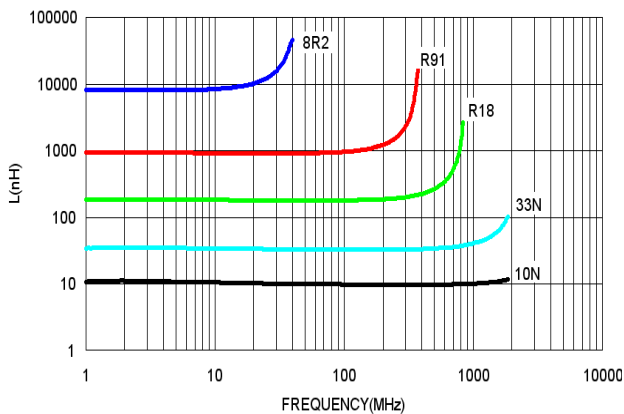
## CS0603



## CS0805



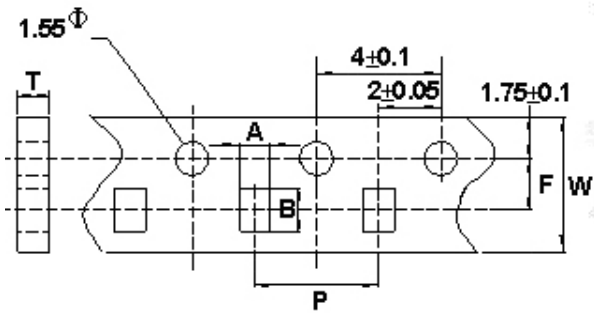
## CS1008



Packaging Specifications

Tape Dimensions

Figure 1



Tape Material

Carrier Tape: Polycarbonate  
Cover Tape: Polystyrene

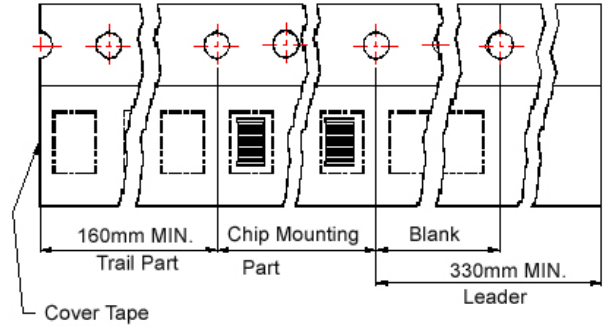
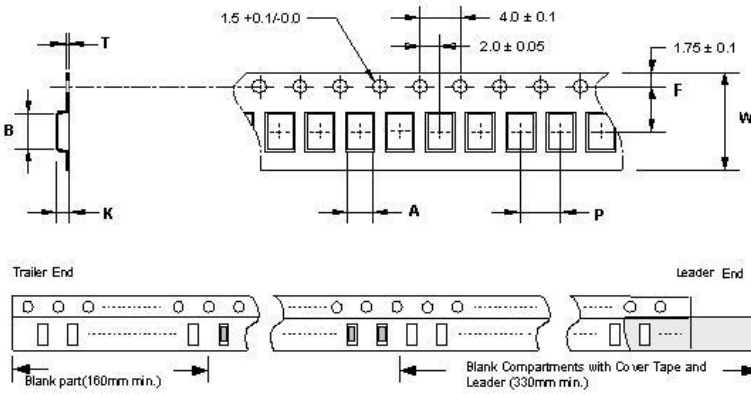
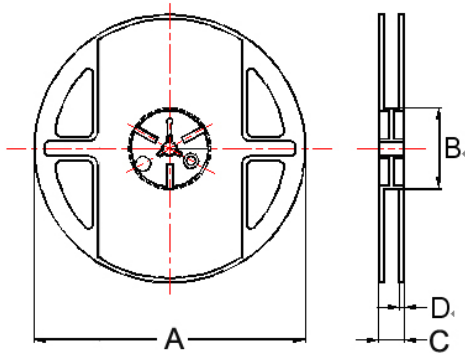


Figure 2



Reel Dimensions



Dimensions in mm

TYPE	Fig.	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
		A	B	T	W	P	F	K	A	B	C	D	
CS0402	1	0.67	1.20	0.75	8	2	3.5	-	178	60	12	1.5	4000
CS0603	1	1.16	1.85	0.95	8	4	3.5	-	178	60	12	1.5	4000
CS0805	2	1.85	2.45	0.23	8	4	3.5	1.50	178	60	12	1.5	2000
CS1008	2	2.80	2.95	0.23	8	4	3.5	2.20	178	60	12	1.5	2000