

Chip Inductors-1812CS Series (4532)

Coilcraft 1812CS is a ceramic chip inductor for applications requiring mid-range inductance and close tolerances ($\pm 5\%$ or $\pm 2\%$). Also, SRF of this

series is up to 3 times higher than commonly available 1812s made on ferrite cores.

Part Number	Inductance ¹ (μH)	Percent Tolerance	Q Min ²	SRF Min ³ (MHz)	R _{DC} Max ⁴ (Ohms)	I _{DC} Max ⁵ (mA)
1812CS-122XKBC	1.2 @ 7.9 MHz	10,5	62 @ 50 MHz	230	1.2	480
1812CS-152XKBC	1.5 @ 7.9 MHz	10,5	65 @ 50 MHz	210	1.6	430
1812CS-182XKBC	1.8 @ 7.9 MHz	10,5	68 @ 50 MHz	190	2.0	380
1812CS-222XKBC	2.2 @ 7.9 MHz	10,5	63 @ 50 MHz	170	2.2	340
1812CS-272XKBC	2.7 @ 7.9 MHz	10,5	63 @ 50 MHz	160	3.2	300
1812CS-332XKBC	3.3 @ 7.9 MHz	10,5	65 @ 50 MHz	145	3.8	270
1812CS-392XKBC	3.9 @ 7.9 MHz	10,5	69 @ 50 MHz	130	5.0	240
1812CS-472XKBC	4.7 @ 7.9 MHz	10,5	63 @ 50 MHz	115	5.4	230
1812CS-562XKBC	5.6 @ 7.9 MHz	10,5	59 @ 50 MHz	100	5.7	220
1812CS-682XKBC	6.8 @ 7.9 MHz	10,5	60 @ 50 MHz	90	6.6	210
1812CS-822XKBC	8.2 @ 7.9 MHz	10,5	47 @ 50 MHz	80	7.0	200
1812CS-103XKBC	10.0 @ 7.9 MHz	10,5	36 @ 50 MHz	70	7.7	190
1812CS-123XKBC	12.0 @ 2.5 MHz	10,5	35 @ 10 MHz	60	8.7	180
1812CS-153XKBC	15.0 @ 2.5 MHz	10,5	34 @ 10 MHz	50	9.6	170
1812CS-183XKBC	18.0 @ 2.5 MHz	10,5	30 @ 10 MHz	45	10.5	160
1812CS-223XKBC	22.0 @ 2.5 MHz	10,5	32 @ 10 MHz	40	11.5	155
1812CS-273XKBC	27.0 @ 2.5 MHz	10,5	29 @ 10 MHz	30	12.5	150
1812CS-333XKBC	33.0 @ 2.5 MHz	10,5	20 @ 10 MHz	20	13.5	145

For help ordering non-standard parts, see "Part Numbering" (Document 120).

For environmental data see "Product Specifications" (Document 121).

For part marking data see "Color Coding" (Document 174).

1. Inductance measured using Coilcraft SMD-A fixture in HP4191A impedance analyzer with Coilcraft-provided correlation pieces. For recommended test procedures, contact Coilcraft.
2. Bold number indicates standard tolerance. When ordering other tolerances, replace the third to the last letter in the part number with the proper tolerance code: F=1%, G=2%, J=5%, K=10%, M=20%. (e.g. 1812CS-223XJBC for a 5% tolerance part).

3. Q measured using HP4291A with HP16193A test fixture using Coilcraft supplied correlation pieces.
4. SRF measured using HP8753B network analyzer and Coilcraft CCF 84C-A test fixture.
5. R_{DC} measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF859 test fixture.
6. For 15°C rise.
7. Operating temperature range -40° to +125°C.

COILCRAFT ACCURATE
REPEATABLE
PRECISION MEASUREMENTS
PAGE 126 **TEST FIXTURES**

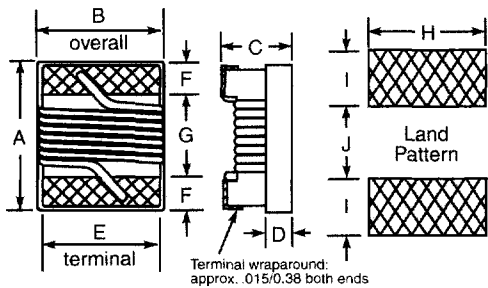
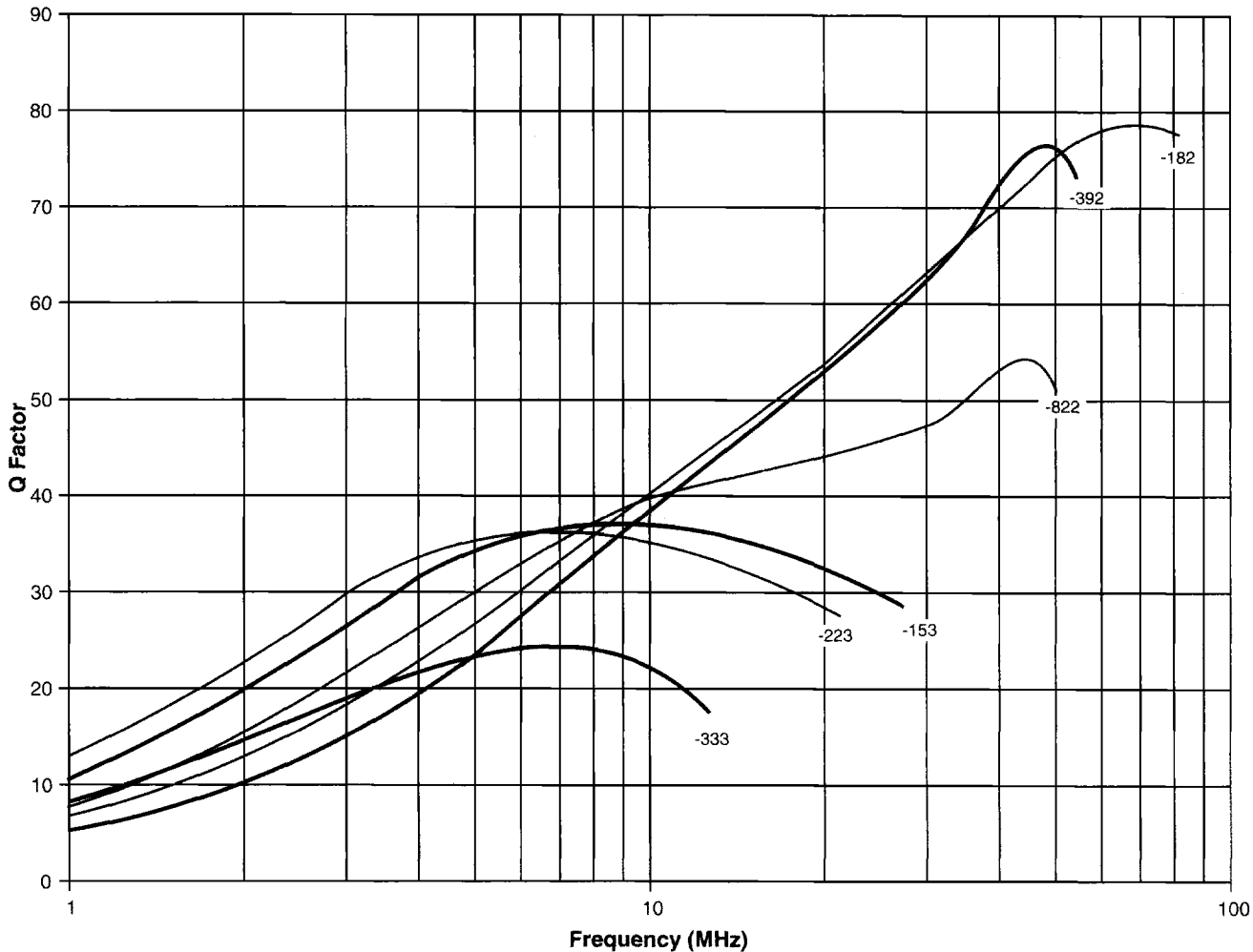
Coilcraft

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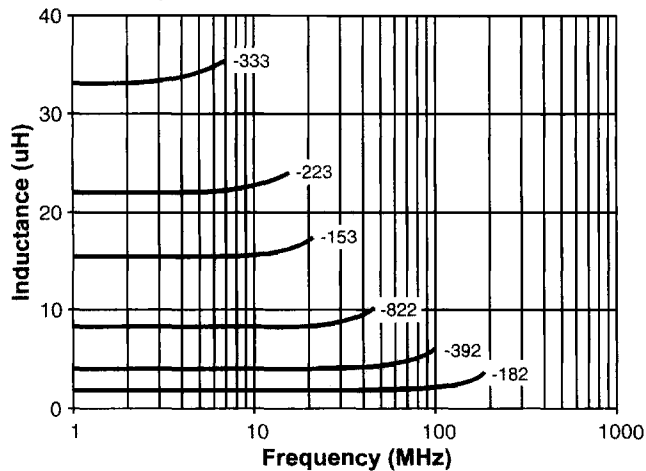
TYPICAL Q vs FREQUENCY



A	B	C	D	E	F	G	H	I	J
Max	Max	Max	Ref						
.195	.150	.135	.070	.100	.025	.128	.120	.045	.118
4.95	3.81	3.43	1.78	2.54	0.64	3.25	3.05	1.14	3.00

Parts/Reel: 7" 600; 13" 2,200 Tape Width: 12mm
 For packaging data see "Tape and Reel Specifications" (Document 173)

L vs FREQUENCY



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