

Chip Inductors – 1812CS Series (4532)

Coilcraft 1812CS ceramic chip inductors are ideal for applications requiring mid-range inductance and close tolerances ($\pm 5\%$). Also, the SRFs of the

parts in this series are up to 3 times higher than those of commonly available 1812 chip inductors made on ferrite cores.

Part Number ¹	Inductance ² (μ H)	Percent Tolerance ³	Q Min ⁴	SRF Min ⁵ (MHz)	R _{DC} Max ⁶ (Ohms)	I _{DC} Max ⁷ (mA)
1812CS-122X_BC	1.2 @ 7.9 MHz	10,5	62 @ 50 MHz	230	1.2	480
1812CS-152X_BC	1.5 @ 7.9 MHz	10,5	65 @ 50 MHz	210	1.6	430
1812CS-182X_BC	1.8 @ 7.9 MHz	10,5	68 @ 50 MHz	190	2.0	380
1812CS-222X_BC	2.2 @ 7.9 MHz	10,5	63 @ 50 MHz	170	2.2	340
1812CS-272X_BC	2.7 @ 7.9 MHz	10,5	63 @ 50 MHz	160	3.2	300
1812CS-332X_BC	3.3 @ 7.9 MHz	10,5	65 @ 50 MHz	145	3.8	270
1812CS-392X_BC	3.9 @ 7.9 MHz	10,5	69 @ 50 MHz	130	5.0	240
1812CS-472X_BC	4.7 @ 7.9 MHz	10,5	63 @ 50 MHz	115	5.4	230
1812CS-562X_BC	5.6 @ 7.9 MHz	10,5	59 @ 50 MHz	100	5.7	220
1812CS-682X_BC	6.8 @ 7.9 MHz	10,5	60 @ 50 MHz	90	6.6	210
1812CS-822X_BC	8.2 @ 7.9 MHz	10,5	47 @ 50 MHz	80	7.0	200
1812CS-103X_BC	10.0 @ 7.9 MHz	10,5	36 @ 50 MHz	70	7.7	190
1812CS-123X_BC	12.0 @ 2.5 MHz	10,5	35 @ 10 MHz	60	8.7	180
1812CS-153X_BC	15.0 @ 2.5 MHz	10,5	34 @ 10 MHz	50	9.6	170
1812CS-183X_BC	18.0 @ 2.5 MHz	10,5	30 @ 10 MHz	45	10.5	160
1812CS-223X_BC	22.0 @ 2.5 MHz	10,5	32 @ 10 MHz	40	11.5	155
1812CS-273X_BC	27.0 @ 2.5 MHz	10,5	29 @ 10 MHz	30	12.5	150
1812CS-333X_BC	33.0 @ 2.5 MHz	10,5	20 @ 10 MHz	20	13.5	145

- For environmental data see "Product Specifications" section (Document 121).
- For part marking data see "Color Coding" section (Document 174).

1. When ordering, please specify tolerance and packaging codes:

1812CS-333X_BC

Packaging

C = EIA RS-481 clear tape and reel (standard).
For orders of less than a full reel, there is a \$25 per reel charge to make them machine-ready.
B = Bulk. In a carrier tape but without leader or trailer.

Inductance tolerance

J=5%, K=10%
Table above shows stock tolerances in bold.

- Inductance measured using Coilcraft SMD-A fixture in HP4286A impedance analyzer with Coilcraft-provided correlation pieces. For recommended test procedures, contact Coilcraft.
- Tolerances in bold are stocked for immediate shipment.
- Q measured using HP4291A with HP16193A test fixture using Coilcraft supplied correlation pieces.
- SRF measured using HP8753D network analyzer and Coilcraft SMD-D test fixture.
- R_{DC} measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF859 test fixture.
- For 15°C rise.
- Operating temperature range -40° to +125°C.
- Electrical specifications at 25°C.

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
DOC. 126 **TEST FIXTURES**

Coilcraft

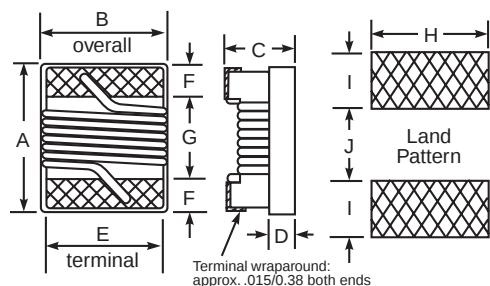
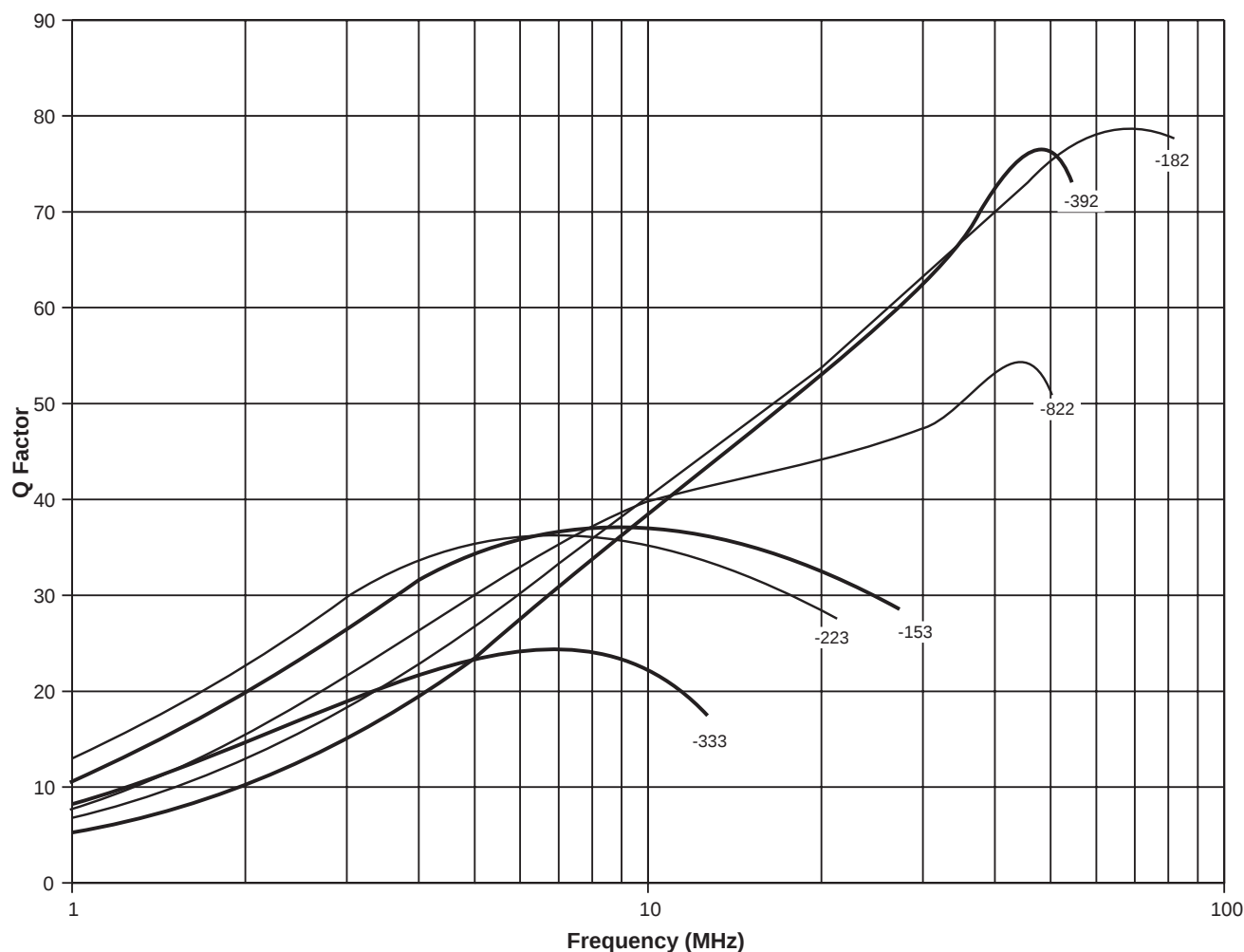
Specifications subject to change without notice. Document 105-1 Revised 2/7/99

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469
E-mail info@coilcraft.com Data by Fax 800/651-6974 Web http://www.coilcraft.com

1812CS Series (4532)

TYPICAL Q vs FREQUENCY

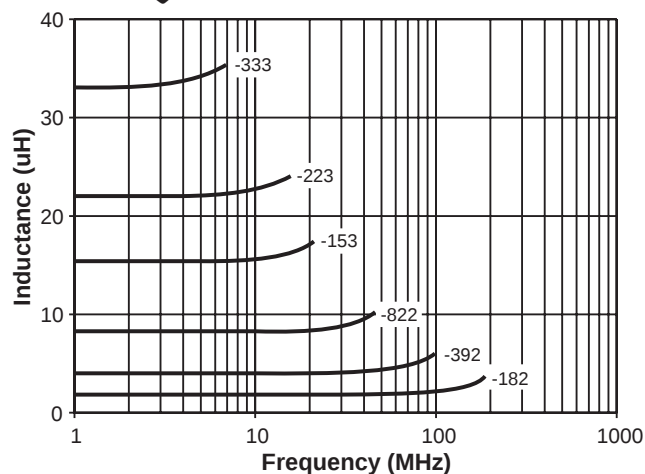
S-Parameter files
ON OUR WEB SITE OR CD
PSPICE models
SEE DOC 158



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



Coilcraft

Specifications subject to change without notice. Document 105-2 Revised 5/19/99

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469
E-mail info@coilcraft.com Data by Fax 800/651-6974 Web http://www.coilcraft.com