Chip Inductors–1008HQ Series (2520)

The 1008HQ Series offers the highest Q factors of any Coilcraft chip inductor family, roughly 20% higher than our popular 1008CS and HS parts.

In addition, current handling has also been improved with significantly lower RDC values.

Like all Coilcraft wirewound ceramic chip inductors, the 1008HQ Series provides exceptional SRFs, tight inductance tolerance, and batch consistency.

For even higher Qs, consider our surface mount spring inductors that combine the high Q of an air wound coil with the convenience of automatic placement.

Coilcraft **Designer's Kit C123** contains samples of all inductance values. To order, contact Coilcraft or visit http://order.coilcraft.com to order on-line.

Part Number[1]	Inductance[3] (nH)	Percent Tolerance[4]	Q Min[5]	SRF Min[6] (GHz)	R_{DC} Max[7] (Ohms)	I_{DC} Max[8] (A)
1008HQ-3N0X_BC[2]	3.0 @ 50 MHz	**10**, 5	70 @ 1500 MHz	6.00	0.04	1.6
1008HQ-4N1X_BC	4.1 @ 50 MHz	**10**, 5	75 @ 1500 MHz	6.00	0.05	1.6
1008HQ-7N8X_BC[2]	7.8 @ 50 MHz	**10**, 5	75 @ 500 MHz	3.80	0.05	1.6
1008HQ-10NX_BC	10 @ 50 MHz	**10, 5, 2**	60 @ 500 MHz	3.60	0.06	1.6
1008HQ-12NX_BC	12 @ 50 MHz	**10, 5, 2**	70 @ 500 MHz	2.80	0.06	1.5
1008HQ-18NX_BC	18 @ 50 MHz	**10, 5, 2**	62 @ 350 MHz	2.70	0.07	1.4
1008HQ-22NX_BC	22 @ 50 MHz	**10, 5, 2**	62 @ 350 MHz	2.05	0.07	1.4
1008HQ-33NX_BC	33 @ 50 MHz	**10, 5, 2**	75 @ 350 MHz	1.70	0.09	1.3
1008HQ-39NX_BC	39 @ 50 MHz	**10, 5, 2**	75 @ 350 MHz	1.30	0.09	1.3
1008HQ-47NX_BC	47 @ 50 MHz	**10, 5, 2**	75 @ 350 MHz	1.45	0.12	1.2
1008HQ-56NX_BC	56 @ 50 MHz	**10, 5, 2**	75 @ 350 MHz	1.23	0.12	1.2
1008HQ-68NX_BC	68 @ 50 MHz	**10, 5, 2**	80 @ 350 MHz	1.15	0.13	1.1
1008HQ-82NX_BC	82 @ 50 MHz	**10, 5, 2**	80 @ 350 MHz	1.06	0.16	1.1
1008HQ-R10X_BC	100 @ 50 MHz	**10, 5, 2**	62 @ 350 MHz	0.82	0.16	1.0

• 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:

1008HQ-R10X_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
G=2%, **J**=5%, **K**=10%
Table above shows stock tolerances in bold.
Other tolerances shown are available on special order.

2. Part is wound on low profile.
3. Inductance measured using Coilcraft SMD-A fixture in HP4286A impedance analyzer with Coilcraft-provided correlation pieces. For recommended test procedures, contact Coilcraft.
4. Tolerances in bold are stocked for immediate shipment.
5. Q measured using HP4291A with HP16193 test fixture and on HP8753D with Coilcraft SMD-D test fixture.
6. SRF measured using HP8753D network analyzer and Coilcraft SMD-D test fixture.
7. R_{DC} measured on Cambridge Technology micro-ohmmeter and Coilcraft CCF 840 test fixture.
8. For 15°C rise.
9. Operating temperature range –40° to +125°C.

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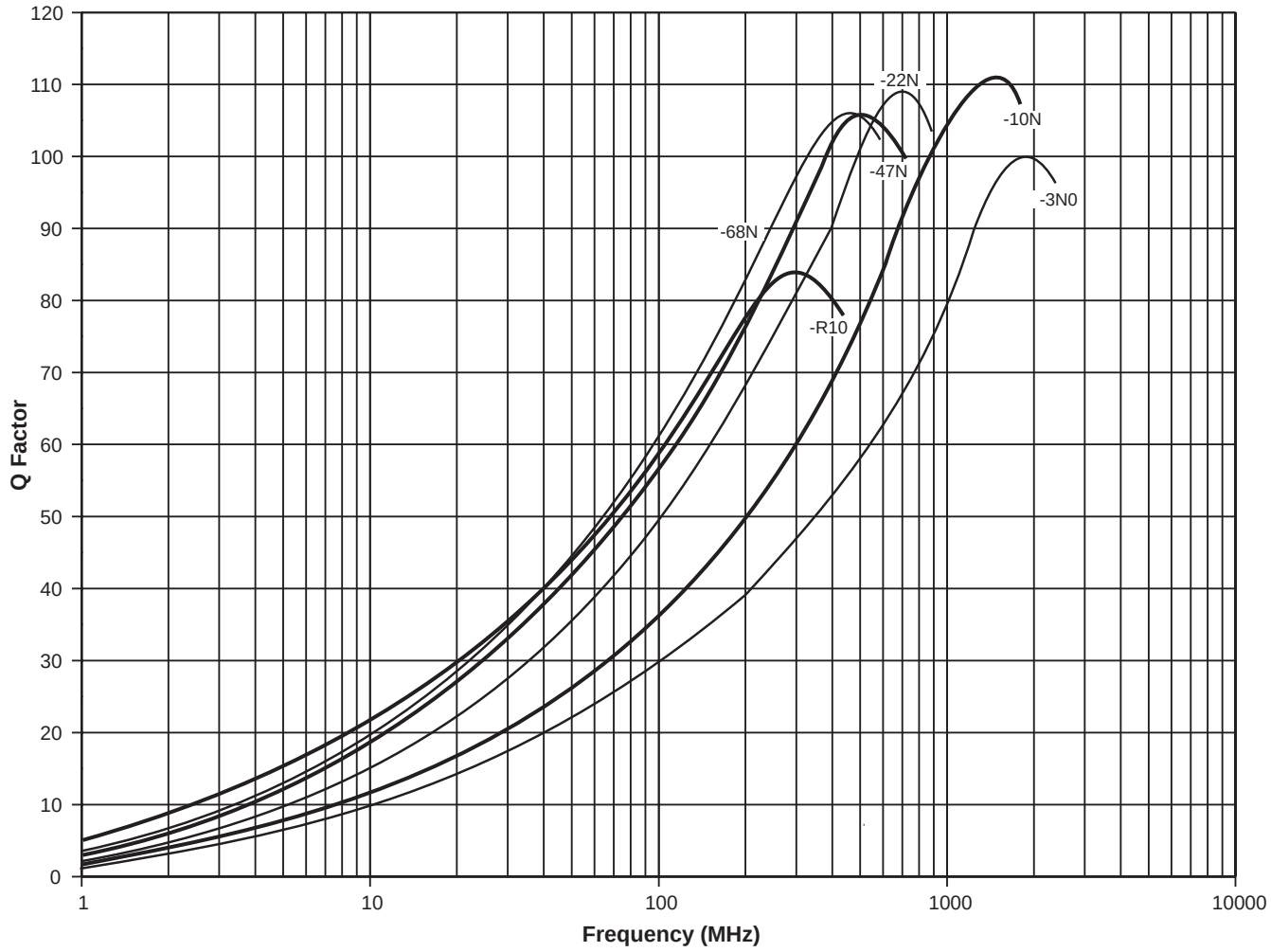
E-mail info@coilcraft.com **Data by Fax** 800/651-6974 **Web** http://www.coilcraft.com

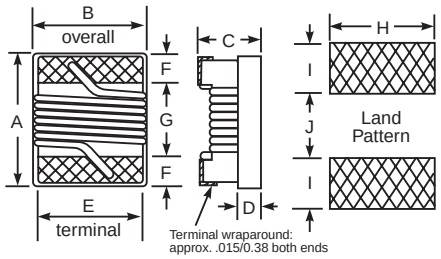
1008HQ Series (2520)

S-Parameter files
ON OUR WEB SITE OR CD

PSPICE models
SEE DOC 158

TYPICAL Q vs FREQUENCY



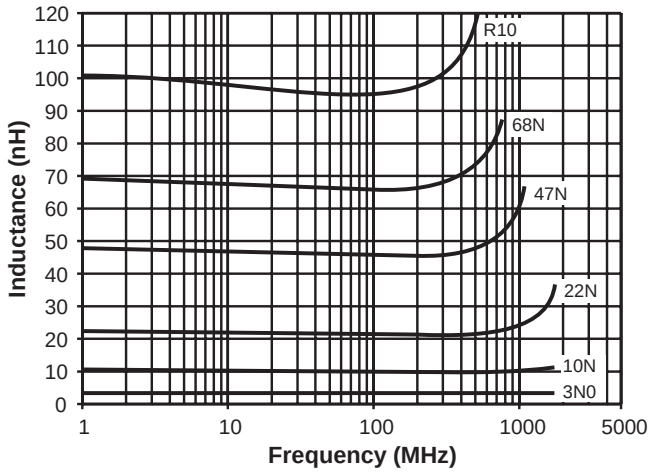


A Max.	B Max.	C* Max.	D Ref.	E	F	G	H	I	J
.115	.110	.080	.020	.080	.020	.060	.100	.040	.050
2,92	2,79	2,03	0,51	2,03	0,51	1,52	2,54	1,02	1,27

*Low profile parts: .050/1,27

Parts/reel: 7″ 2,000; 13″ 7,500 Tape width: 8mm
For packaging data see "Tape and Reel Specifications" (Document 173)

L vs FREQUENCY



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