RoHS/ REACH COMPLIANT

Halogen Free

Chip Inductors – 0805HT (2012)

At just 0.035″ high, these are one of our lowest profile surface mount inductors. Their wire wound ceramic design provides tight tolerances, exceptional Q and high SRF values.

Coilcraft **Designer's Kit C321** contains samples of all 5% parts shown as stocked. To order, contact Coilcraft or visit **http://order.coilcraft.com** to purchase on-line.

Part number[1]	Inductance[2] (nH)	Percent tolerance[3]	Q min[4]	SRF min[5] (MHz)	DCR max[6] (Ohms)	Irms[7] (mA)	Color Code
0805HT-1N8TJR_	1.8 @ 250 MHz	**5**	55 @ 1500 MHz	9400	0.030	800	Black
0805HT-2N0TJR_	2.0 @ 250 MHz	**5**	55 @ 1500 MHz	11500	0.018	800	Violet
0805HT-3N9TJR_	3.9 @ 250 MHz	**5**	50 @ 1000 MHz	6100	0.055	800	Brown
0805HT-4N3TJR_	4.3 @ 250 MHz	**5**	80 @ 1000 MHz	6364	0.030	800	White
0805HT-4N7TJR_	4.7 @ 250 MHz	**5**	50 @ 1000 MHz	5500	0.060	800	Red
0805HT-5N1TJR_	5.1 @ 250 MHz	**5**	45 @ 1000 MHz	6100	0.069	800	Blue
0805HT-5N6TJR_	5.6 @ 250 MHz	**5**	45 @ 1000 MHz	5800	0.091	800	Gray
0805HT-6N8TJR_	6.8 @ 250 MHz	**5**	50 @ 1000 MHz	4800	0.080	800	Orange
0805HT-7N5TJR_	7.5 @ 250 MHz	**5**	47 @ 1000 MHz	4600	0.082	800	Black
0805HT-8N2TJR_	8.2 @ 250 MHz	**5**	50 @ 1000 MHz	4800	0.080	800	Yellow
0805HT-9N1TJR_	9.1 @ 250 MHz	**5**	54 @ 1000 MHz	3900	0.105	800	Red
0805HT-10NT_R_	10 @ 250 MHz	**5,2**	55 @ 750 MHz	3300	0.080	800	Green
0805HT-12NT_R_	12 @ 250 MHz	**5,2**	55 @ 750 MHz	3800	0.10	800	Blue
0805HT-15NT_R_	15 @ 250 MHz	**5,2**	50 @ 500 MHz	2950	0.10	800	Violet
0805HT-18NT_R_	18 @ 250 MHz	**5,2**	50 @ 500 MHz	3100	0.13	800	Gray
0805HT-20NT_R_	20 @ 250 MHz	**5,2**	50 @ 500 MHz	2700	0.17	800	Yellow
0805HT-22NT_R_	22 @ 250 MHz	**5,2**	50 @ 500 MHz	2900	0.15	800	White
0805HT-27NT_R_	27 @ 250 MHz	**5,2**	50 @ 500 MHz	2450	0.19	700	Black
0805HT-33NT_R_	33 @ 250 MHz	**5,2**	55 @ 500 MHz	2350	0.19	600	Brown
0805HT-39NT_R_	39 @ 250 MHz	**5,2**,1	55 @ 500 MHz	2200	0.27	600	Red
0805HT-47NT_R_	47 @ 200 MHz	**5,2**,1	50 @ 500 MHz	2000	0.30	600	Orange
0805HT-56NT_R_	56 @ 200 MHz	**5,2**,1	50 @ 500 MHz	1850	0.39	500	Yellow
0805HT-68NT_R_	68 @ 200 MHz	**5,2**,1	50 @ 500 MHz	1500	0.40	500	Green
0805HT-82NT_R_	82 @ 150 MHz	**5,2**,1	50 @ 500 MHz	1500	0.44	500	Blue
0805HT-R10T_R_	100 @ 150 MHz	**5,2**	50 @ 500 MHz	1200	0.64	400	Violet
0805HT-R12T_R_	120 @ 150 MHz	**5,2**	40 @ 250 MHz	1150	0.68	300	Gray
0805HT-R15T_R_	150 @ 150 MHz	**5,2**	40 @ 250 MHz	1050	0.80	300	White
0805HT-R18T_R_	180 @ 150 MHz	**5,2**	40 @ 250 MHz	830	0.86	300	Black
0805HT-R22T_R_	220 @ 150 MHz	**5,2**	39 @ 150 MHz	820	1.29	200	Orange
0805HT-R27T_R_	270 @ 150 MHz	**5,2**	33 @ 150 MHz	790	1.40	200	Yellow
0805HT-R33T_R_	330 @ 150 MHz	**5,2**	32 @ 150 MHz	730	1.93	200	Green
0805HT-R39T_R_	390 @ 100 MHz	**5,2**	30 @ 150 MHz	675	2.80	200	Blue
0805HT-R47T_R_	470 @ 100 MHz	**5,2**	30 @ 150 MHz	610	3.10	200	Violet
0805HT-R50T_R_	500 @ 50 MHz	**5,2**	20 @ 50 MHz	585	3.20	200	Gray

1. When ordering, specify **tolerance, termination** and **packaging** codes:

0805HT-R50TGRC

Tolerance: **F** = 1% **G** = 2% **J** = 5%
(Table shows stock tolerances in bold.)

Termination: **R** = RoHS compliant matte tin over nickel over silver-platinum-glass frit.
E = Halogen free component. RoHS compliant silver-palladium-platinum-glass frit terminations.
L = RoHS compliant, not halogen-free. Silver-palladium-platinum-glass frit terminations.
Special order: **T** = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).

Packaging: **C** = 7″ machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
D = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (7500 parts per full reel).
B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

2. Inductance measured using a Coilcraft SMD-A fixture in an Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.
3. Tolerances in bold are stocked for immediate shipment.
4. Q measured using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture and on an Agilent/HP 8753D with a Coilcraft SMD-D test fixture.
5. SRF measured using an Agilent/HP 8720D network analyzer and a Coilcraft SMD-D test fixture.
6. DCR measured on a Cambridge Technology micro-ohmmeter and a Coilcraft CCF858 test fixture.
7. Current that causes a 15°C temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
8. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

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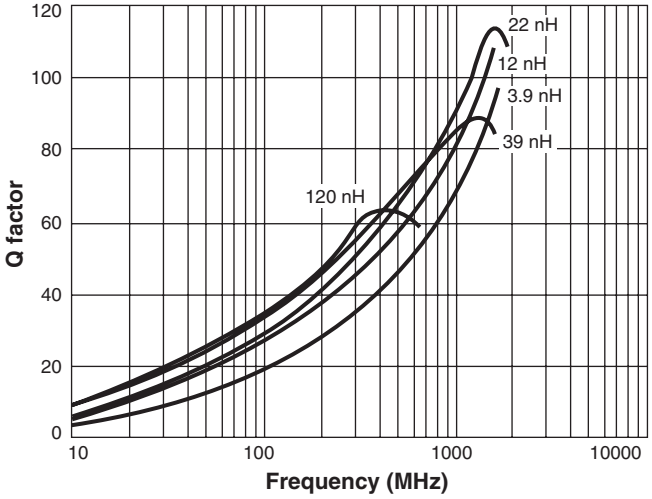
S-Parameter files
ON OUR WEB SITE

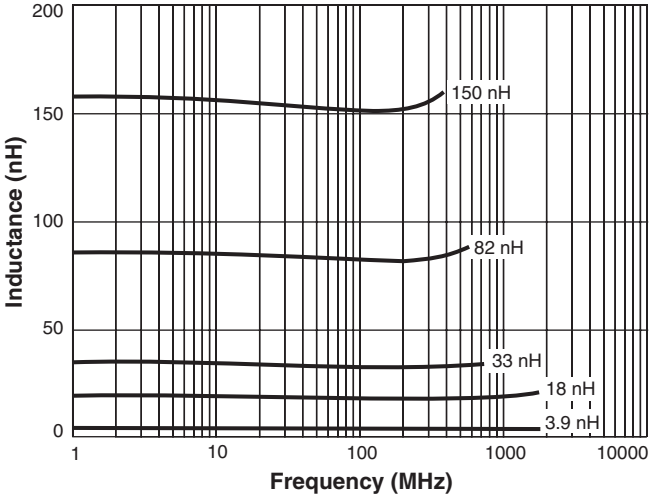
SPICE models
ON OUR WEB SITE

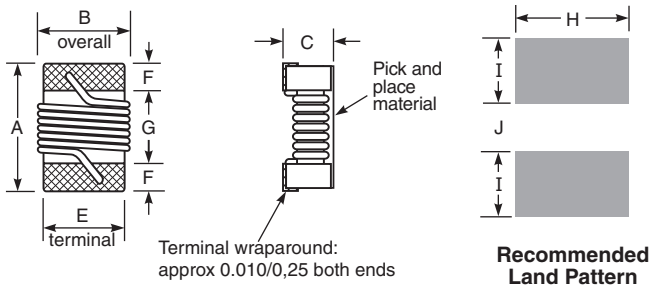
0805HT Series (2012)

Typical Q vs Frequency



Typical L vs Frequency





A max	B max	C max	E	F	G	H	I	J	
0.085	0.060	0.035	0.050	0.017	0.045	0.070	0.040	0.030	inches
2,16	1,52	0,89	1,27	0,43	1,14	1,78	1,02	0,76	mm

Note: Height dimension (C) is before optional solder application. For maximum height dimension including solder, add 0.006 in / 0,152 mm.

Designer's Kit C321 contains samples of all 5% tolerance parts

Core material Ceramic

Environmental RoHS compliant, halogen free

Terminations RoHS compliant matte tin over nickel over silver platinum-glass frit. Other terminations available at additional cost.

Weight 6.0 – 6.9 mg

Ambient temperature –40°C to +125°C with Irms current

Maximum part temperature +140°C (ambient + temp rise).

Storage temperature Component: –40°C to +140°C.
Tape and reel packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Temperature Coefficient of Inductance (TCL) +25 to +125 ppm/°C

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging 2000/7″ reel; 7500/13″ reel; Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 0.9 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

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