NEW!

Chip Inductors – 0805HP (2012)

- Exceptional Q values, even at high frequencies
- Tight tolerances – 2% for most
- Wirewound construction for highest possible self resonance – up to 9.5 GHz

Part number[1]	Inductance[2] (nH)	Percent tolerance[3]	Q typ[4]	SRF typ[5] (MHz)	DCR max[6] (Ohms)	Irms[7] (A)
0805HP-2N6XJR_	2.6 @ 250 MHz	**5**	100 @ 1500 MHz	9500	0.015	2.0
0805HP-6N2XJR_	6.2 @ 250 MHz	**5**	104 @ 1000 MHz	7200	0.027	1.5
0805HP-6N8XJR_	6.8 @ 250 MHz	**5**	90 @ 1000 MHz	6000	0.066	1.3
0805HP-11NX_R_	11 @ 250 MHz	**5,2**	93 @ 500 MHz	4750	0.039	1.6
0805HP-12NX_R_	12 @ 250 MHz	**5,2**	91 @ 500 MHz	4425	0.039	1.4
0805HP-13NX_R_	13 @ 250 MHz	**5,2**	91 @ 500 MHz	4100	0.039	1.4
0805HP-18NX_R_	18 @ 250 MHz	**5,2**	95 @ 500 MHz	3650	0.050	1.2
0805HP-33NX_R_	33 @ 250 MHz	**5,2**	100 @ 500 MHz	2410	0.087	1.1
0805HP-47NX_R_	47 @ 200 MHz	**5,2**	105 @ 500 MHz	2170	0.093	1.0
0805HP-56NX_R_	56 @ 200 MHz	**5,2**	100 @ 500 MHz	1815	0.122	0.95
0805HP-82NX_R_	82 @ 150 MHz	**5,2**	103 @ 500 MHz	1525	0.168	0.82
0805HP-101X_R_	100 @ 150 MHz	**5,2**	100 @ 500 MHz	1400	0.220	0.72
0805HP-121X_R_	120 @ 150 MHz	**5,2**	80 @ 250 MHz	1265	0.293	0.62
0805HP-151X_R_	150 @ 100 MHz	**5,2**	80 @ 250 MHz	1150	0.288	0.60
0805HP-181X_R_	180 @ 100 MHz	**5,2**	77 @ 250 MHz	1025	0.374	0.54
0805HP-221X_R_	220 @ 100 MHz	**5,2**	75 @ 250 MHz	930	0.426	0.50
0805HP-271X_R_	270 @ 100 MHz	**5,2**	75 @ 100 MHz	830	0.754	0.42
0805HP-331X_R_	330 @ 100 MHz	**5,2**	54 @ 100 MHz	770	1.004	0.36
0805HP-391X_R_	390 @ 100 MHz	**5,2**	52 @ 100 MHz	700	1.110	0.33
0805HP-471X_R_	470 @ 50 MHz	**5,2**	52 @ 100 MHz	640	1.559	0.28
0805HP-561X_R_	560 @ 25 MHz	**5,2**	46 @ 100 MHz	550	2.067	0.24
0805HP-681X_R_	680 @ 25 MHz	**5,2**	46 @ 100 MHz	535	2.355	0.21
0805HP-821X_R_	820 @ 25 MHz	**5,2**	50 @ 100 MHz	485	3.945	0.18

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

0805HP-821XJRC

Tolerance: **G** = 2% **J** = 5%

Termination: **R** = RoHS matte tin over nickel over silver-platinum-glass frit
Special order: **Q** = RoHS tin-silver-copper (95.5/4/0.5) over tin or **P** = non-RoHS tin-lead (63/37) over tin.

Packaging: **C** = 7″ machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel).
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
D = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (7500 parts per full reel).

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.
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.

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 9.5 – 12.5 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) +100 to +250 ppm/°C

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

Failures in Time (FIT) / Mean Time Between Failures (MTBF) One per billion hours / one billion hours, calculated per Telcordia SR-332

Packaging 2000/7″ reel; 7500/13″ reel. Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.65 mm pocket depth

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

Coilcraft
www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 1362-1 Revised 07/02/16

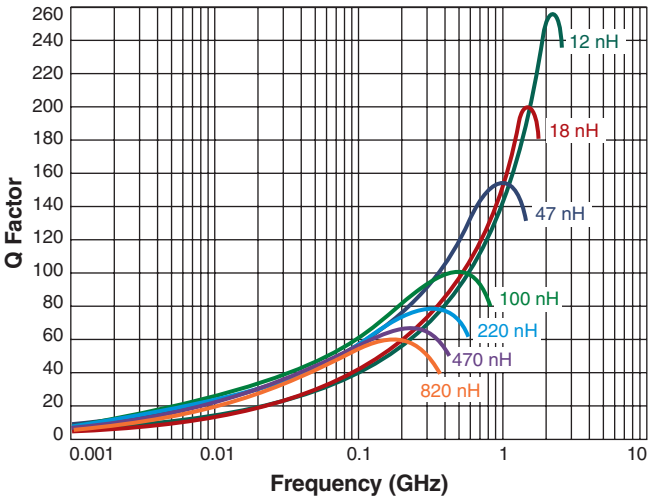
NEW!

RoHS COMPLIANT

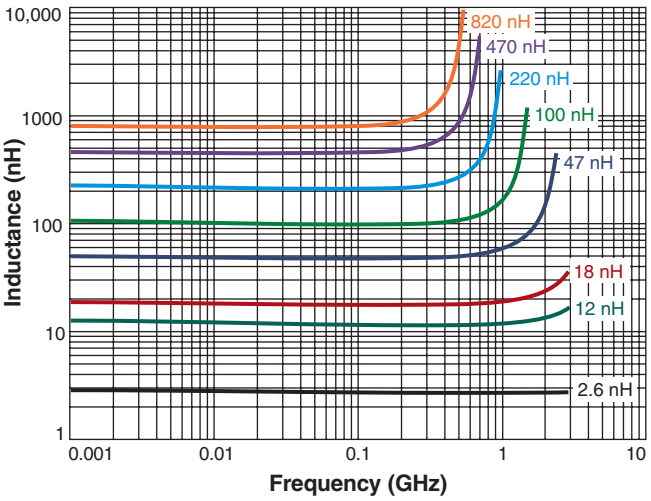
Halogen Free

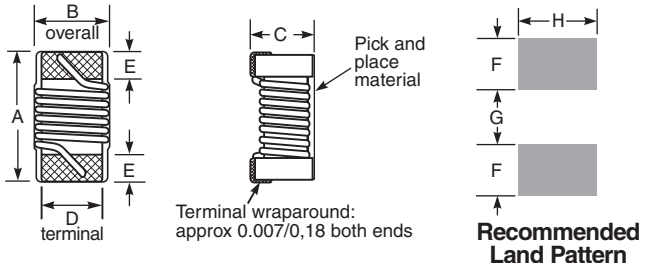
0805HP Series (2012)

Typical Q vs Frequency



Typical L vs Frequency





A max	B max	C max	D ref	E	F	G	H	
0.087	0.068	0.061	0.061	0.012	0.040	0.044	0.078	inches
2,21	1,73	1,55	1,55	0,30	1,02	1,12	1,98	mm

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

Coilcraft®
www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 1362-2 Revised 07/02/16