



Ceramic Chip Inductors 0201HL

- Higher L than other 0201 inductors
- Twice the Q of thin-film multilayer technology
- Optimized for LTE Antenna matching

Part number ¹	Inductance ² ±5% (nH)	900 MHz		1.7 GHz		2.4 GHz		SRF typ ⁴ (GHz)	DCR max ⁵ (Ohms)	Irms ⁶ (mA)
		L typ	Q typ ³	L typ	Q typ ³	L typ	Q typ ³			
0201HL-22NXJR_	22	21.8	36	22.7	52	24.2	62	4.35	0.75	140
0201HL-24NXJR_	24	23.8	36	24.9	53	27.1	56	4.35	0.93	130
0201HL-27NXJR_	27	26.9	35	28.2	47	30.5	55	3.95	1.03	125
0201HL-33NXJR_	33	33.0	35	35.4	45	39.6	49	3.70	1.14	120
0201HL-39NXJR_	39	39.4	35	42.7	43	49.5	45	3.45	1.55	100
0201HL-47NXJR_	47	47.6	35	52.8	43	64.3	41	3.25	1.70	95
0201HL-51NXJR_	51	51.9	35	58.3	44	71.5	44	3.45	1.85	90

1. When ordering, please specify **packaging** code:

0201HL-51NXJR^W

Packaging: W = 7" machine-ready reel. EIA-481 punched paper tape (2000 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

U = 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 U to W.

- Inductance measured at 250 MHz using a Coilcraft SMD-F fixture in an Agilent/HP 4982 impedance analyzer with Coilcraft-provided correlation pieces.
- Q measured using an Agilent/HP 4991A with an Agilent/HP 16197 test fixture.
- SRF measured using an Agilent/HP 8722ES network analyzer and a Coilcraft SMD-D test fixture.
- DCR measured on a micro-ohmmeter and a Coilcraft CCF858 test fixture.
- Current that causes a 15°C temperature rise from 25°C ambient. Because the core is not ferromagnetic, there is no core saturation.
- 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 matte tin over nickel over molybdenum-manganese.

Weight 0.14 – 0.23 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

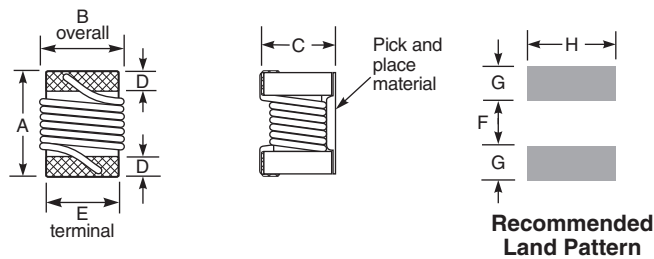
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Temperature Coefficient of Inductance (TCL) +25 to +150 ppm/°C

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

Packaging 2000 per 7" reel. Paper tape: 8 mm wide, 0.68 mm thick, 2 mm pocket spacing

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

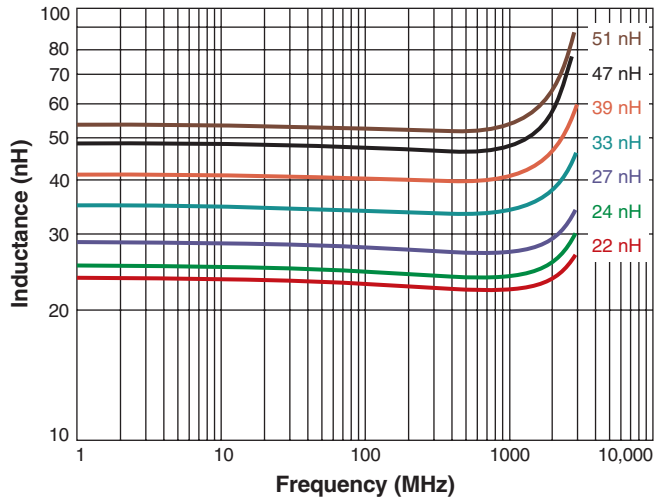


Amax	Bmax	Cmax	D	E	F	G	H	
0.023	0.018	0.018	0.004	0.015	0.009	0.007	0.018	inches
0,58	0,46	0,46	0,10	0,38	0,23	0,18	0,46	mm

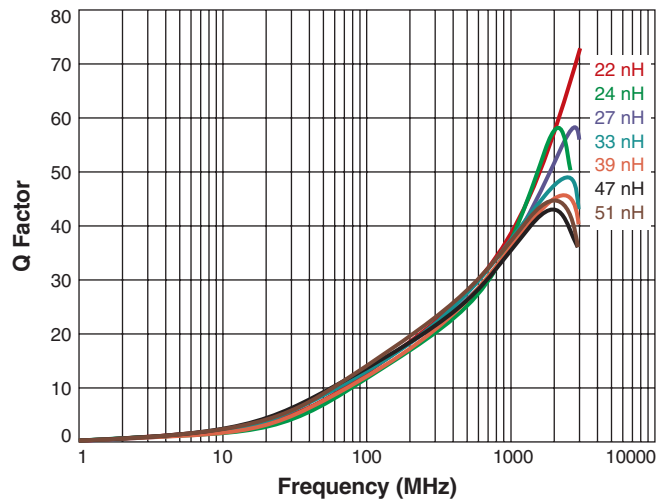


Chip Inductors – 0201HL Series

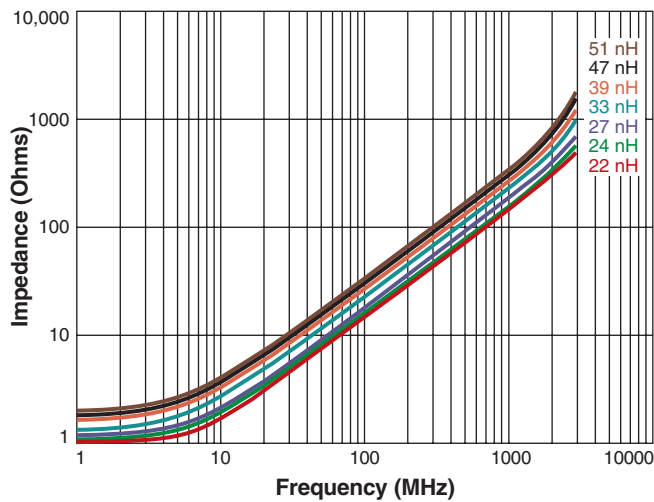
L vs Frequency



Q vs Frequency



Impedance vs Frequency



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