

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).

U = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter W instead.

- 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

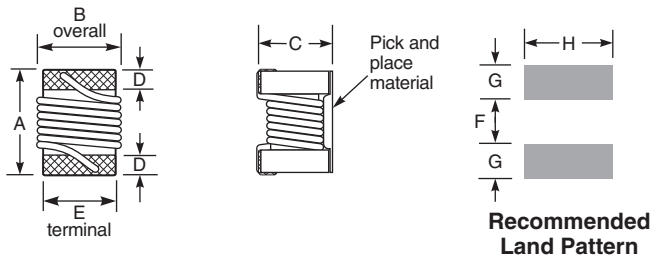
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

One per billion hours / one billion hours, calculated per Telcordia SR-332

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



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

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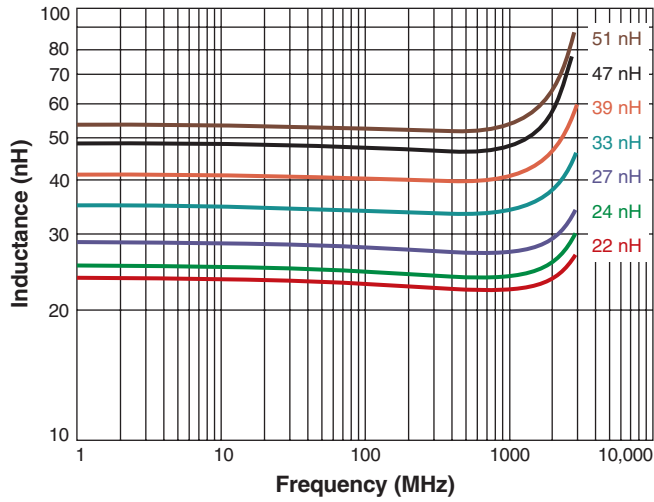
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NEW!

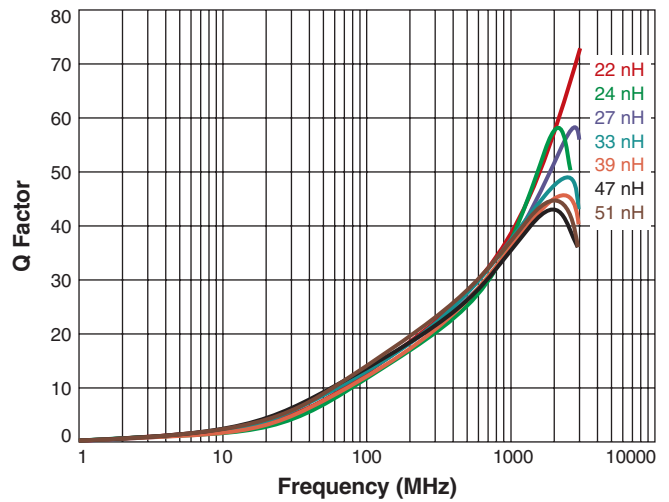
Chip Inductors – 0201HL Series



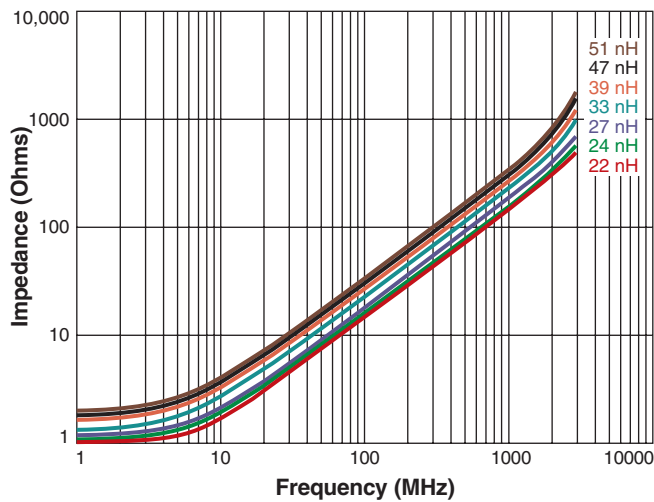
L vs Frequency



Q vs Frequency



Impedance vs Frequency



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

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