

**NEW!**

Chip Inductors – 0402HL (1005)

- Higher inductance values than other 0402 ceramic chip inductors
- 12 inductance values from 270 nH to 820 nH

Part number ¹	Inductance ² ±5% (nH)	SRF typ ³ (MHz)	DCR max ⁴ (Ohms)	Irms ⁵ (mA)
0402HL-271XJR_	270	590	1.95	190
0402HL-301XJR_	300	600	2.15	190
0402HL-331XJR_	330	513	2.23	170
0402HL-361XJR_	360	485	2.36	170
0402HL-391XJR_	390	260	2.35	170
0402HL-471XJR_	470	220	2.67	160
0402HL-511XJR_	510	450	3.50	150
0402HL-561XJR_	560	420	3.70	140
0402HL-601XJR_	600	440	3.78	130
0402HL-681XJR_	680	380	5.15	120
0402HL-741XJR_	740	165	5.45	110
0402HL-821XJR_	820	385	5.85	90

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

0402HL-821XJRW

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

2. Inductance measured at 25 MHz using a Coilcraft SMD-F test fixture and Coilcraft-provided correlation pieces with an Agilent/HP 4286 impedance analyzer.
3. SRF measured using Agilent/HP 8753D network analyzer and Coilcraft SMD-D test fixture.
4. DCR measured on Cambridge Technology micro-ohmmeter and a Coilcraft CCF858 test fixture.
5. Current that causes a 15°C temperature rise from 25°C ambient. Because of their open construction, these parts will not saturate. 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 0.7 – 1.3 mg

Ambient temperature –40°C to +125°C with Irms current, +125°C to +140°C with derated current

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

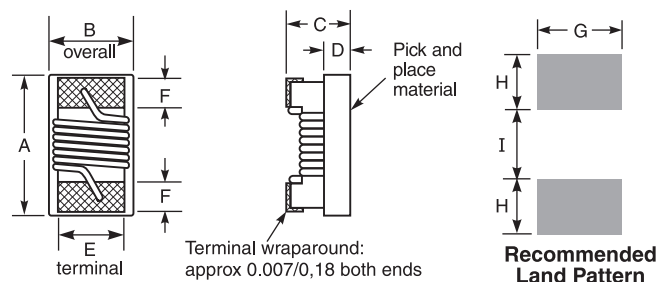
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

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, 0.66 mm thick, 2 mm pocket spacing

PCB washing Only pure water or alcohol recommended



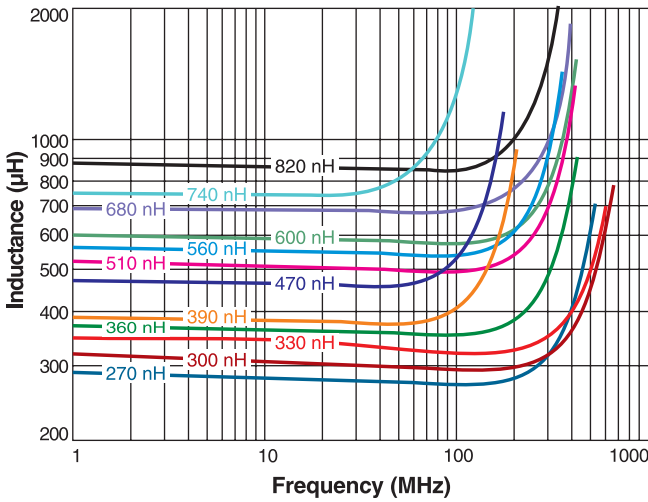
Amax	Bmax	Cmax	D	E	F	G	H	I
0.048	0.031	0.022	0.010	0.018	0.008	0.026	0.014	0.025
1,22	0,79	0,56	0,25	0,46	0,20	0,66	0,36	0,64

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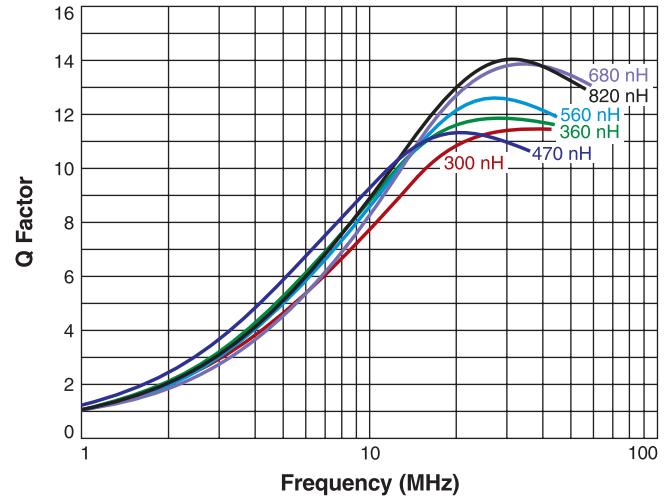


Chip Inductors – 0402HL Series

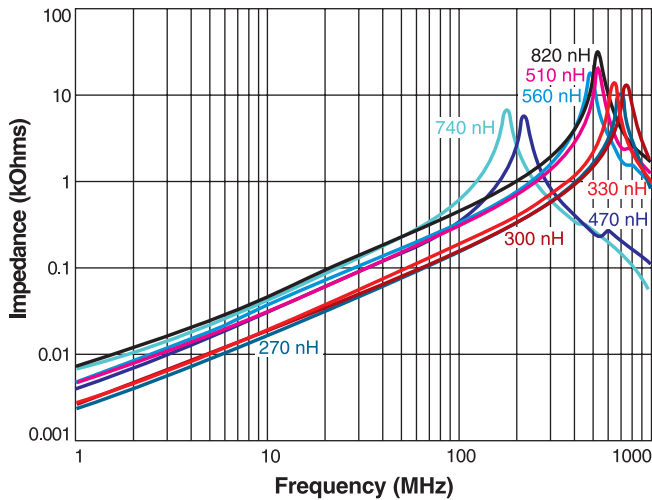
L vs Frequency



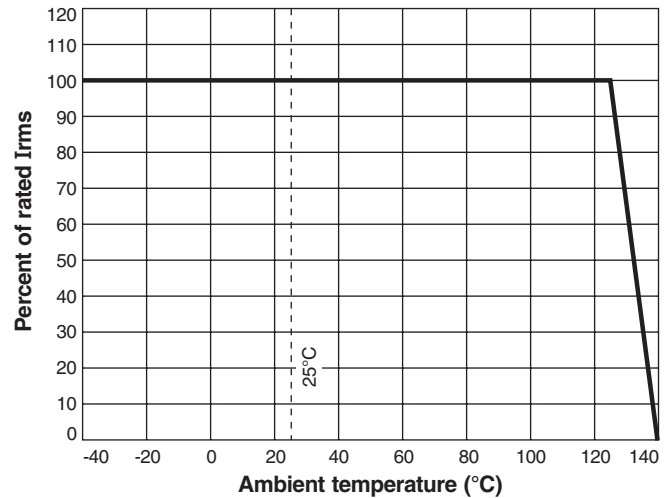
Typical Q vs Frequency



Typical Impedance vs Frequency



Irms Derating



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