



Chip Inductors - 0201CT Series (0603)

- 0201 sized inductor with low-profile 0.35 mm maximum height
- Excellent Q compared to non-wirewound alternatives at this height
- Very high SRF – as high as 35.2 GHz
- AEC-Q200 qualified

Core material Ceramic

Environmental RoHS compliant without exemption, halogen free

Terminations RoHS compliant matte tin over nickel over silver-glass frit.

Weight 0.14 – 0.24 mg

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

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

Storage temperature Component: –55°C to +140°C.

Tape and reel packaging: –55°C to +80°C

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

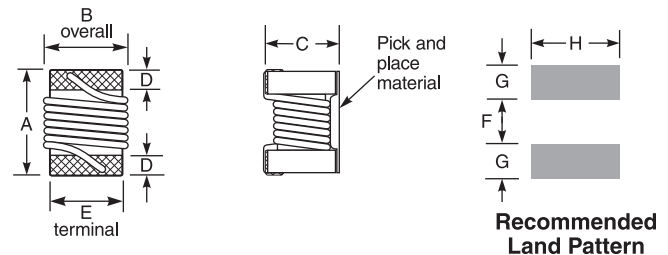
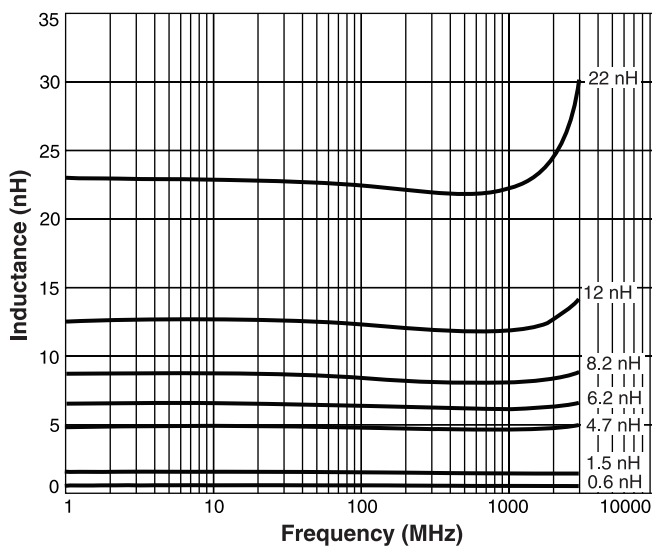
Temperature Coefficient of Inductance (TCL) +25 to +125 ppm/°C

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

Packaging 2000 or 10,000 per 7" reel; Paper tape: 8 mm wide, 0.42 mm thick, 2 mm pocket spacing

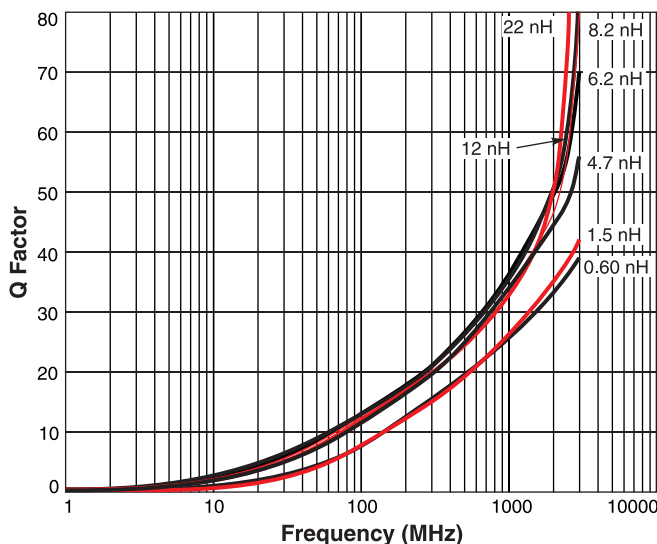
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Typical L vs Frequency



Amax	Bmax	Cmax	D	E	F	G	H	
0.023	0.018	0.014	0.004	0.015	0.009	0.007	0.018	inches
0,58	0,46	0,35	0,10	0,38	0,23	0,18	0,46	mm

Typical Q vs Frequency





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Part number ¹	L ² (nH)	Percent tolerance ³	900 MHz Q typ ⁴	1.7 GHz Q typ ⁴	2.4 GHz Q typ ⁴	SRF typ ⁵ (GHz)	DCR max ⁶ (mOhms)	I _{rms} (mA)		
								25°C ⁷	85°C ⁸	125°C ⁹
0201CT-0N6XKR_	0.6	10	28	41	53	35.2	60	700	240	140
0201CT-1N5XKR_	1.5	10	27	40	49	20.3	130	460	190	100
0201CT-2N4XKR_	2.4	10	34	53	66	15.8	130	470	300	180
0201CT-4N7XKR_	4.7	10	34	52	61	9.60	210	360	240	140
0201CT-5N1XKR_	5.1	10	30	42	48	9.15	330	290	170	90
0201CT-5N6XKR_	5.6	10	35	48	56	9.75	210	360	300	180
0201CT-6N2XKR_	6.2	10	35	48	55	8.65	210	360	300	180
0201CT-6N8XKR_	6.8	10	32	43	48	7.95	270	340	240	140
0201CT-7N5XKR_	7.5	10	30	41	47	7.85	500	290	140	70
0201CT-8N2XKR_	8.2	10	35	48	54	7.70	260	330	300	180
0201CT-9N1XKR_	9.1	10	33	45	50	6.80	395	270	190	100
0201CT-11NXKR_	11	10	34	46	50	6.80	480	250	190	100
0201CT-12NXKR_	12	10	33	43	45	6.15	460	250	190	100
0201CT-22NXKR_	22	10	30	35	32	4.50	925	170	140	70

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

0201CT-22NXKRW

Tolerance: K = 10%

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).

Y = 7" machine-ready reel. EIA-481 punched paper tape. Factory order only, not stocked (10000 parts per full reel).

- Inductance measured at 250 MHz using a Coilcraft SMD-F fixture in an Agilent/HP 4287 impedance analyzer with Coilcraft-provided correlation pieces.
 - Tolerances in bold are stocked for immediate shipment.
 - 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 cause 15°C rise at 25°C.
 - Maximum current that can be applied at 85°C.
 - Maximum current that can be applied at 125°C.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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