

**NEW!**

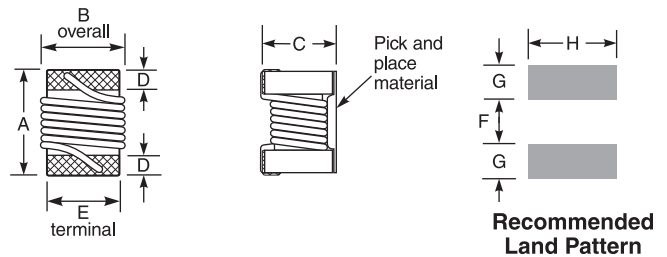
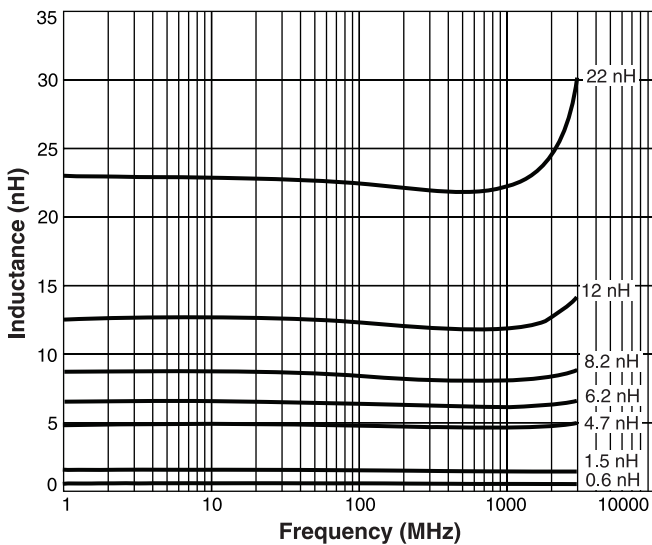
# Chip Inductors - 0201CT Series (0603)



- 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 Grade 1 (-40°C to +125°C)

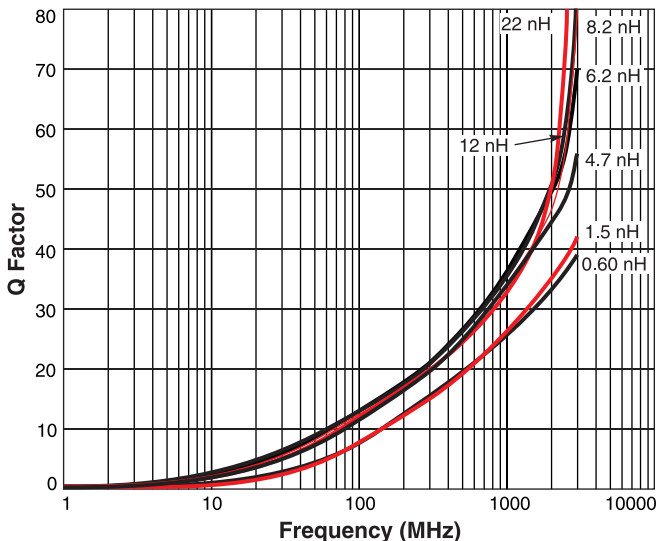
**Core material** Ceramic  
**Environmental** RoHS compliant without exemption, halogen free  
**Terminations** RoHS compliant matte tin over nickel over silver-glass frit.  
**Weight** 0.14 – 0.24 mg  
**Ambient temperature** -40°C to +125°C with Irms current  
**Maximum part temperature** +140°C (ambient + 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



A max	B max	C max	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





# 0201CT Series (0603)

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