



# Chip Inductors - 0201DS Series (0603)

- 0201 size; world's smallest wirewound inductor
- 52 inductance values from 0.5 to 14 nH

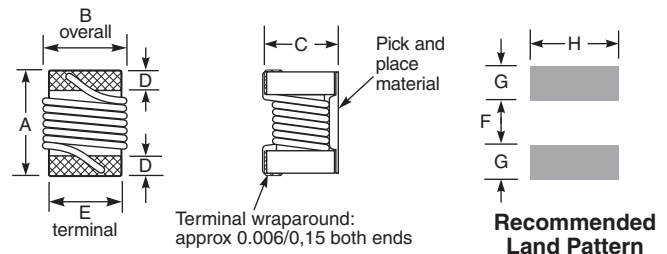
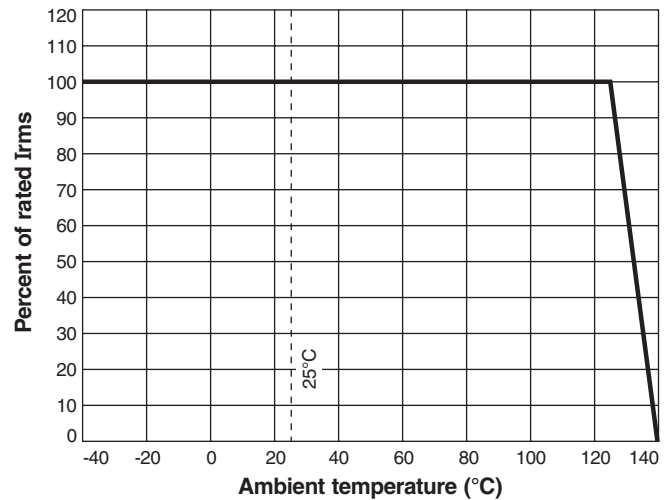
## Typical Q vs Frequency



## Typical L vs Frequency



## Irms Derating



A max	B max	C max	D	E	F	G	H	
0.023	0.018	0.0177	0.004	0.015	0.009	0.007	0.018	inches
0,58	0,46	0,45	0,10	0,38	0,23	0,18	0,46	mm

**Designer's Kits C425A and B** contain 20 of each value

**Core material** Ceramic

**Environmental** RoHS compliant, halogen free

**Terminations** RoHS compliant matte tin over nickel over silver.

**Weight** 0.14 – 0.23 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 +125 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, 0.6 mm thick, 2 mm pocket spacing

**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf.



**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

Document 699-1 Revised 03/24/14

© Coilcraft Inc. 2014

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



# 0201DS Chip Inductor Series (0603)

Part number <sup>1</sup>	Inductance <sup>2</sup> (nH)	Percent tolerance	900 MHz		1.7 GHz		SRF typ <sup>4</sup> (GHz)	DCR max <sup>5</sup> (Ohms)	I <sub>rms</sub> <sup>6</sup> (mA)
			L typ	Q typ <sup>3</sup>	L typ	Q typ <sup>3</sup>			
0201DS-0N5XKE_	0.5	10	0.50	29	0.49	43	23.5	0.020	1250
0201DS-0N6XKE_	0.6	10	0.58	31	0.58	51	24.5	0.030	1000
0201DS-1N2XJE_	1.2	5	1.16	42	1.16	60	17.9	0.042	870
0201DS-1N3XJE_	1.3	5	1.24	38	1.24	57	17.6	0.048	820
0201DS-1N4XJE_	1.4	5	1.35	27	1.34	37	17.0	0.080	630
0201DS-1N5XJE_	1.5	5	1.47	28	1.47	40	17.0	0.090	600
0201DS-2N2XJE_	2.2	5	2.23	32	2.23	32	16.7	0.070	700
0201DS-2N3XJE_	2.3	5	2.28	45	2.28	64	16.5	0.070	670
0201DS-2N4XJE_	2.4	5	2.36	35	2.36	53	13.0	0.082	620
0201DS-2N5XJE_	2.5	5	2.50	31	2.49	44	12.5	0.165	440
0201DS-3N3XJE_	3.3	5	3.31	42	3.32	62	12.8	0.080	630
0201DS-3N4XJE_	3.4	5	3.38	42	3.42	62	12.7	0.080	630
0201DS-3N5XJE_	3.5	5	3.41	44	3.45	64	12.4	0.080	630
0201DS-3N6XJE_	3.6	5	3.53	40	3.57	61	12.5	0.105	550
0201DS-3N7XJE_	3.7	5	3.65	39	3.66	58	10.6	0.105	550
0201DS-3N8XJE_	3.8	5	3.81	38	3.81	60	10.2	0.180	420
0201DS-3N9XJE_	3.9	5	3.89	35	3.89	50	11.2	0.240	360
0201DS-4N8XJE_	4.8	5	4.83	34	4.83	50	11.0	0.096	570
0201DS-4N9XJE_	4.9	5	4.72	33	4.71	52	11.7	0.130	510
0201DS-5N0XJE_	5.0	5	4.90	34	4.90	54	11.5	0.130	510
0201DS-5N1XJE_	5.1	5	4.96	35	4.96	54	11.1	0.130	510
0201DS-5N2XJE_	5.2	5	5.21	36	5.21	55	10.0	0.170	430
0201DS-5N3XJE_	5.3	5	5.15	36	5.15	57	10.6	0.130	510
0201DS-5N4XJE_	5.4	5	5.30	36	5.31	56	10.2	0.130	510
0201DS-5N5XJE_	5.5	5	5.49	35	5.49	50	9.5	0.285	330
0201DS-6N7XJE_	6.7	5	6.71	40	6.72	59	6.8	0.150	460
0201DS-6N8XJE_	6.8	5	6.52	35	6.52	52	9.5	1.150	460
0201DS-6N9XJE_	6.9	5	6.70	36	6.73	54	9.3	0.150	460
0201DS-7N0XJE_	7.0	5	6.97	39	6.97	60	6.7	0.210	390
0201DS-7N1XJE_	7.1	5	6.91	36	6.90	54	9.5	0.250	390
0201DS-7N2XJE_	7.2	5	6.97	36	6.97	55	9.4	0.250	390
0201DS-7N3XJE_	7.3	5	7.05	37	7.04	56	9.3	0.250	390
0201DS-7N4XJE_	7.4	5	7.29	40	7.30	61	9.1	0.250	390
0201DS-7N5XJE_	7.5	5	7.44	36	7.46	50	6.8	0.340	300
0201DS-7N6XJE_	7.6	5	7.32	39	7.31	59	9.3	0.300	340
0201DS-7N7XJE_	7.7	5	7.38	39	7.37	60	9.2	0.300	340
0201DS-7N8XJE_	7.8	5	7.49	38	7.49	58	9.2	0.300	340
0201DS-7N9XJE_	7.9	5	7.56	38	7.56	58	9.1	0.300	340
0201DS-8N0XJE_	8.0	5	7.65	35	7.68	53	9.2	0.300	340
0201DS-8N1XJE_	8.1	5	7.74	37	7.75	59	9.1	0.300	340
0201DS-8N2XJE_	8.2	5	8.14	37	8.22	53	6.4	0.270	340
0201DS-8N3XJE_	8.3	5	7.93	36	7.95	57	8.9	0.300	340
0201DS-8N4XJE_	8.4	5	8.03	35	8.04	55	8.9	0.350	300
0201DS-8N5XJE_	8.5	5	8.11	35	8.13	55	8.9	0.350	300
0201DS-8N7XJE_	8.7	5	8.68	38	8.74	59	6.3	0.350	300
0201DS-9N0XJE_	9.0	5	9.02	42	9.04	63	6.4	0.350	300
0201DS-9N4XJE_	9.4	5	9.38	36	9.39	51	6.4	0.400	280
0201DS-9N6XJE_	9.6	5	9.62	38	9.64	53	6.2	0.400	280
0201DS-11NXJE_	11.0	5	11.11	40	11.15	62	5.7	0.400	280
0201DS-12NXJE_	12.0	5	12.15	39	12.20	56	5.6	0.360	300
0201DS-13NXJE_	13.0	5	13.12	38	13.22	52	6.7	0.440	270
0201DS-14NXJE_	14.0	5	14.13	37	14.37	51	5.1	0.440	270

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

**0201DS-14NXJEW**

**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 250 MHz using a Coilcraft SMD-F fixture in an Agilent/HP 4286 impedance analyzer with Coilcraft-provided correlation pieces.

3. Q measured using an Agilent/HP 4291A with an Agilent/HP 16197 test fixture.

4. SRF measured using an Agilent/HP 8722ES network analyzer and a test fixture with a 0.010" air gap.

5. DCR measured on a micro-ohmmeter and a Coilcraft CCF858 test fixture.

6. Current that causes a 15°C temperature rise from 25°C ambient.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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

Document 699-2 Revised 03/24/14

© Coilcraft Inc. 2014

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9