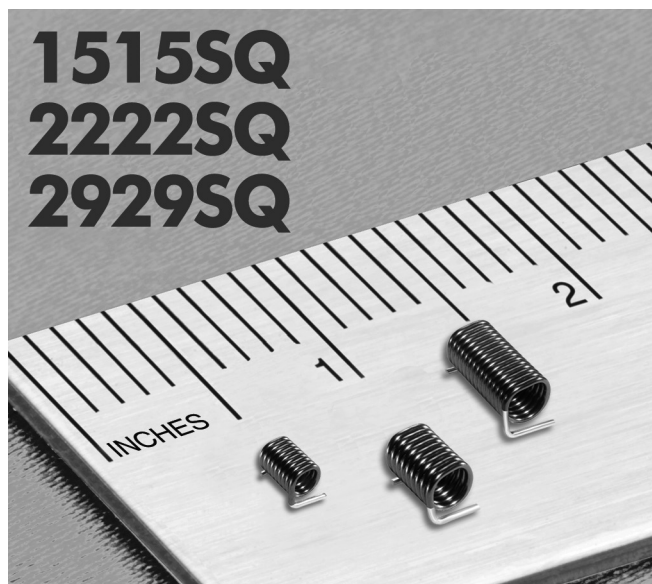



NEW!

Square Air Core Inductors

**1515SQ
2222SQ
2929SQ**


- Excellent Q factors – up to 230 at 400 MHz!
- Current handling as high as 5.7 Amps
- Inductance values from 47 to 500 nH
- Flat top and bottom for reliable pick and place and mechanical stability

Designer's Kit C438 contains 10 each of all 5% parts

Terminations RoHS compliant tin-silver over copper

Ambient temperature –40°C to +125°C with Irms current, +125°C to +145°C with derated current

Storage temperature Component: –40°C to +145°C.
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) +5 to +70 ppm/°C

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

Mean Time Between Failures (MTBF) 1 billion hours

PCB washing Only pure water or alcohol recommended

Part number ¹	Inductance ² (nH)	Percent tolerance ³	Q ⁴ typ	Test frequency (MHz)	SRF min ⁵ (GHz)	DCR max (mOhm)	Irms ⁶ (A)
1515SQ-47N_E_	47	5,2	230	400	1.87	6.35	4.9
1515SQ-68N_E_	68	5,2	230	400	2.13	8.60	5.5
1515SQ-82N_E_	82	5,2	230	400	1.79	9.40	5.6
2222SQ-90N_E_	90	5,2	140	50	1.15	5.50	5.0
2222SQ-111_E_	110	5,2	140	50	1.00	6.50	5.7
2222SQ-131_E_	130	5,2	140	50	1.00	7.50	5.4
2222SQ-161_E_	160	5,2	140	50	1.00	8.25	5.7
2222SQ-181_E_	180	5,2	140	50	1.10	9.50	5.0
2222SQ-221_E_	220	5,2	140	50	1.00	11.0	5.0
2222SQ-271_E_	270	5,2	140	50	0.800	12.5	4.3
2222SQ-301_E_	300	5,2	150	50	0.720	13.8	3.7
2929SQ-331_E_	330	5,2	180	50	0.660	12.5	4.7
2929SQ-361_E_	360	5,2	180	50	0.620	13.5	4.5
2929SQ-391_E_	390	5,2	180	50	0.590	14.5	4.4
2929SQ-431_E_	430	5,2	180	50	0.550	15.5	4.2
2929SQ-501_E_	500	5,2	180	50	0.500	16.5	4.3

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

1515SQ-82NJE

Tolerance: G = 2% J = 5%

(Table shows stock tolerances in bold.)

Termination: E = RoHS compliant tin-silver (96.5/3.5) over copper.

Special order, added cost:

T = RoHS tin-silver-copper (95.5/4/0.5) over copper
or S = non-RoHS tin-lead (63/37) over copper.

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape.

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

D = 13" machine-ready reel. EIA-481 embossed plastic
tape. Factory order only, not stocked.

2. Inductance measured at specified test frequency, 0.1 Vrms, 0 A using an Agilent/HP 4287A LCR meter with the following Coilcraft test fixtures: CCF1191C for 1515SQ; CCF1197A for 2222SQ and 2929SQ.

3. Tolerances in bold are stocked for immediate shipment.

4. Q measured at specified test frequency, using an Agilent/HP 4291A impedance analyzer.

5. SRF measured using an Agilent/HP 8753 network analyzer and the following Coilcraft test fixtures: CCF1143 for 1515SQ; CCF1199 for 2222SQ-90N and 2222SQ-161; CCF1200 for 2222SQ-301 and 2929SQ-501.

6. Current that causes a 20°C temperature rise from 25°C ambient.

7. Electrical specifications at 25°C.

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

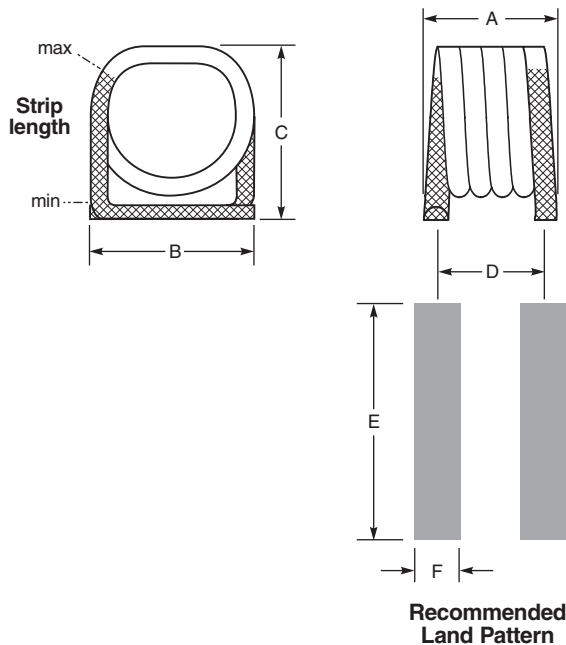
Document 720-1 Revised 08/16/12

© Coilcraft Inc. 2012

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


NEW!

Square Air Core Inductors – 1515SQ, 2222SQ, 2929SQ



Packaging:

1515SQ-47N 500/7" reel; 2000/13" reel Plastic tape: 12 mm wide, 0.26 mm thick, 8 mm pocket spacing, 4.06 mm pocket depth

1515SQ-68N 500/7" reel; 2000/13" reel Plastic tape: 12 mm wide, 0.26 mm thick, 8 mm pocket spacing, 4.06 mm pocket depth

1515SQ-82N 500/7" reel; 2000/13" reel Plastic tape: 12 mm wide, 0.26 mm thick, 8 mm pocket spacing, 4.06 mm pocket depth

2222SQ-90N 250/7" reel; 750/13" reel Plastic tape: 16 mm wide, 0.32 mm thick, 12 mm pocket spacing, 5.97 mm pocket depth

2222SQ-111 250/7" reel; 750/13" reel Plastic tape: 16 mm wide, 0.40 mm thick, 12 mm pocket spacing, 6.10 mm pocket depth

2222SQ-131 250/7" reel; 750/13" reel Plastic tape: 16 mm wide, 0.40 mm thick, 12 mm pocket spacing, 6.10 mm pocket depth

2222SQ-161 250/7" reel; 750/13" reel Plastic tape: 16 mm wide, 0.33 mm thick, 12 mm pocket spacing, 5.97 mm pocket depth

2222SQ-181 250/7" reel; 750/13" reel Plastic tape: 16 mm wide, 0.40 mm thick, 12 mm pocket spacing, 6.10 mm pocket depth

2222SQ-221 250/7" reel; 750/13" reel Plastic tape: 24 mm wide, 0.40 mm thick, 12 mm pocket spacing, 6.10 mm pocket depth

2222SQ-271 250/7" reel; 750/13" reel Plastic tape: 24 mm wide, 0.40 mm thick, 12 mm pocket spacing, 6.10 mm pocket depth

2222SQ-301 250/7" reel; 750/13" reel Plastic tape: 24 mm wide, 0.33 mm thick, 12 mm pocket spacing, 5.97 mm pocket depth

2929SQ-331 150/7" reel; 600/13" reel Plastic tape: 24 mm wide, 0.40 mm thick, 12 mm pocket spacing, 6.99 mm pocket depth

2929SQ-361 150/7" reel; 600/13" reel Plastic tape: 24 mm wide, 0.40 mm thick, 12 mm pocket spacing, 7.75 mm pocket depth

2929SQ-391 150/7" reel; 600/13" reel Plastic tape: 24 mm wide, 0.45 mm thick, 12 mm pocket spacing, 7.75 mm pocket depth

2929SQ-431 150/7" reel; 600/13" reel Plastic tape: 24 mm wide, 0.45 mm thick, 12 mm pocket spacing, 7.75 mm pocket depth

2929SQ-501 150/7" reel; 600/13" reel Plastic tape: 24 mm wide, 0.33 mm thick, 12 mm pocket spacing, 7.49 mm pocket depth

Part number	A	B	C	D	E	F	Weight (mg)
1515SQ-47N	0.160±0.010 4.06 ±0.254	0.140 ±0.007 3.56 ±0.178	0.147 ±0.007 3.73 ±0.178	0.140 3.56	0.175 4.45	0.070 1.78	110
1515SQ-68N	0.210 ±0.010 5.33 ±0.254	0.140 ±0.007 3.56 ±0.178	0.147 ±0.007 3.73 ±0.178	0.190 4.83	0.175 4.45	0.070 1.78	145
1515SQ-82N	0.230 ±0.010 5.84 ±0.254	0.140 ±0.007 3.56 ±0.178	0.147 ±0.007 3.73 ±0.178	0.210 5.33	0.175 4.45	0.070 1.78	165
2222SQ-90N	0.205 ±0.015 5.21 ±0.381	0.215 ±0.010 5.46 ±0.254	0.224 ±0.010 5.69 ±0.254	0.175 4.45	0.255 6.48	0.085 2.16	280
2222SQ-111	0.250 ±0.015 6.35 ±0.381	0.220 ±0.010 5.59 ±0.254	0.224 ±0.010 5.69 ±0.254	0.230 5.84	0.265 6.73	0.085 2.16	330
2222SQ-131	0.265 ±0.015 6.73 ±0.381	0.220 ±0.010 5.59 ±0.254	0.224 ±0.010 5.69 ±0.254	0.245 6.22	0.265 6.73	0.085 2.16	371
2222SQ-161	0.290 ±0.015 7.37 ±0.381	0.220 ±0.010 5.59 ±0.254	0.224 ±0.010 5.69 ±0.254	0.260 6.60	0.265 6.73	0.085 2.16	425
2222SQ-181	0.320 ±0.015 8.19 ±0.381	0.220 ±0.010 5.59 ±0.254	0.224 ±0.010 5.69 ±0.254	0.290 7.37	0.265 6.73	0.085 2.16	460
2222SQ-221	0.390 ±0.015 9.91 ±0.381	0.220 ±0.010 5.59 ±0.254	0.224 ±0.010 5.69 ±0.254	0.360 9.14	0.265 6.73	0.085 2.16	550
2222SQ-271	0.460 ±0.015 11.68 ±0.381	0.220 ±0.010 5.59 ±0.254	0.224 ±0.010 5.69 ±0.254	0.420 10.67	0.265 6.73	0.085 2.16	640
2222SQ-301	0.470 ±0.015 11.94 ±0.381	0.225 ±0.010 5.72 ±0.254	0.224 ±0.010 5.69 ±0.254	0.440 11.18	0.265 6.73	0.085 2.16	650
2929SQ-331	0.405 ±0.015 10.29 ±0.381	0.295 ±0.010 7.49 ±0.254	0.285 ±0.010 7.24 ±0.254	0.375 9.53	0.325 8.26	0.09 2.29	855
2929SQ-361	0.445 ±0.015 11.30 ±0.381	0.295 ±0.010 7.49 ±0.254	0.285 ±0.010 7.24 ±0.254	0.415 10.541	0.325 8.26	0.09 2.29	928
2929SQ-391	0.485 ±0.015 12.32 ±0.381	0.295 ±0.010 7.49 ±0.254	0.285 ±0.010 7.24 ±0.254	0.455 11.56	0.325 8.26	0.09 2.29	990
2929SQ-431	0.520 ±0.015 13.21 ±0.381	0.295 ±0.010 7.49 ±0.254	0.285 ±0.010 7.24 ±0.254	0.490 12.45	0.325 8.26	0.09 2.29	1072
2929SQ-501	0.550 ±0.015 14.00 ±0.381	0.290 ±0.010 7.49 ±0.254	0.285 ±0.010 7.24 ±0.254	0.520 13.21	0.325 8.26	0.09 2.29	1160

All dimensions are in $\frac{\text{inches}}{\text{mm}}$.

S-Parameter files
ON OUR WEB SITE

SPICE models
ON OUR WEB SITE



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 720-2 Revised 08/16/12

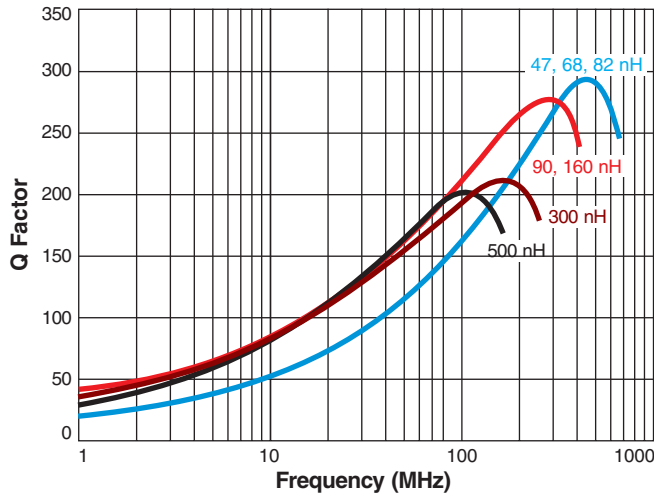
© Coilcraft Inc. 2012

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

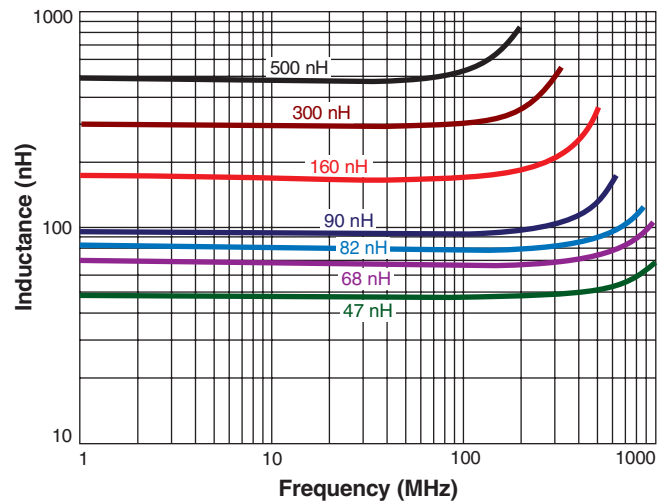
NEW!

Square Air Core Inductors – 1515SQ, 2222SQ, 2929SQ

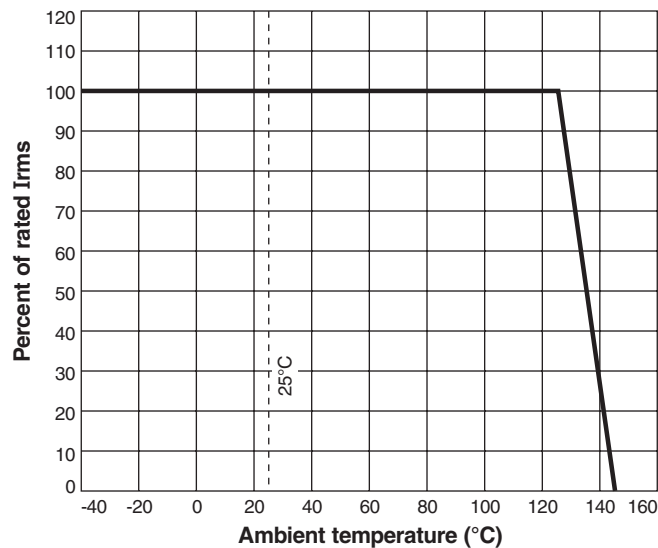
Typical Q vs Frequency



Typical L vs Frequency



Irms Derating


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 720-2 Revised 08/16/12

© Coilcraft Inc. 2012

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

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9