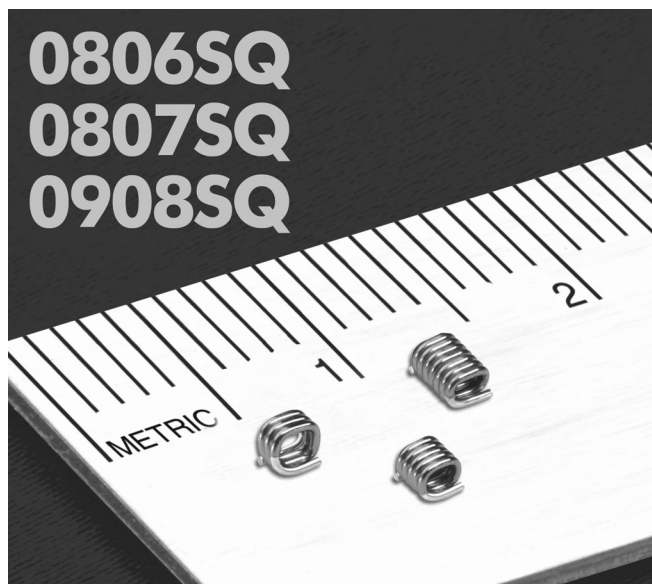




Square Air Core Inductors



- Excellent Q factors – up to 130
- Current handling as high as 4.4 Amps!
- 20 inductance values from 5.5 to 27 nH
- Flat top and bottom for reliable pick and place and mechanical stability
- All values available in 2% tolerance

Designer's Kit C424 contains 10 each of all 5% values;
Designer's Kit C424-2 contains 10 each of all 2% values

Environmental RoHS compliant, halogen free

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 +125°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) +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 Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

| Part number ¹ | Inductance ² (nH) | % tol ³ | Q ⁴ typ | SRF typ ⁵ (GHz) | DCR max (mOhm) | Irms ⁶ (A) |
|--------------------------|---------------------------------|-----------------------|-----------------------|----------------------------------|----------------------|--------------------------|
| 0806SQ-5N5_L_ | 5.5 | 5,2 | 60 | 4.9 | 3.4 | 2.9 |
| 0806SQ-6N0_L_ | 6.0 | 5,2 | 64 | 5.2 | 6.0 | 2.9 |
| 0806SQ-8N9_L_ | 8.9 | 5,2 | 90 | 4.3 | 7.0 | 2.9 |
| 0806SQ-12N_L_ | 12.3 | 5,2 | 90 | 4.8 | 8.0 | 2.9 |
| 0806SQ-16N_L_ | 15.7 | 5,2 | 90 | 4.4 | 9.0 | 2.9 |
| 0806SQ-19N_L_ | 19.4 | 5,2 | 90 | 4.0 | 10.0 | 2.9 |
| 0807SQ-6N9_L_ | 6.9 | 5,2 | 100 | 4.6 | 6.0 | 2.7 |
| 0807SQ-10N_L_ | 10.2 | 5,2 | 100 | 4.0 | 7.0 | 2.7 |
| 0807SQ-11N_L_ | 11.2 | 5,2 | 90 | 3.6 | 6.3 | 2.7 |
| 0807SQ-14N_L_ | 13.7 | 5,2 | 100 | 4.3 | 8.0 | 2.7 |
| 0807SQ-17N_L_ | 17.0 | 5,2 | 100 | 4.0 | 9.0 | 2.7 |
| 0807SQ-22N_L_ | 22.0 | 5,2 | 100 | 3.5 | 10.0 | 2.7 |
| 0908SQ-8N1_L_ | 8.1 | 5,2 | 130 | 5.2 | 6.0 | 4.4 |
| 0908SQ-12N_L_ | 12.1 | 5,2 | 130 | 4.3 | 7.0 | 4.4 |
| 0908SQ-14N_L_ | 14.7 | 5,2 | 90 | 3.0 | 7.2 | 4.4 |
| 0908SQ-17N_L_ | 16.6 | 5,2 | 130 | 3.4 | 8.0 | 4.4 |
| 0908SQ-22N_L_ | 21.5 | 5,2 | 130 | 3.7 | 9.0 | 4.4 |
| 0908SQ-23N_L_ | 23.0 | 5,2 | 120 | 2.6 | 10.0 | 4.4 |
| 0908SQ-25N_L_ | 25.0 | 5,2 | 130 | 2.5 | 10.0 | 4.4 |
| 0908SQ-27N_L_ | 27.3 | 5,2 | 130 | 3.2 | 10.0 | 4.4 |

1. Please specify **tolerance, termination and packaging** codes:

0908SQ-27NGLC

Tolerance: **G** = 2%, **J** = 5% (Table shows stock tolerances in bold.)

Termination: **L** = 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 400 MHz, 0.1 Vrms, 0 A using an Agilent/HP 4287A LCR meter or equivalent with a Coilcraft CCF1166 test fixture and Coilcraft-provided correlation pieces.
3. Tolerances in bold are stocked for immediate shipment.
4. Q measured at 400 MHz using an Agilent/HP 4291A impedance analyzer or equivalent.
5. SRF measured using an Agilent/HP 8753 network analyzer and a Coilcraft SMD-D test fixture.
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.



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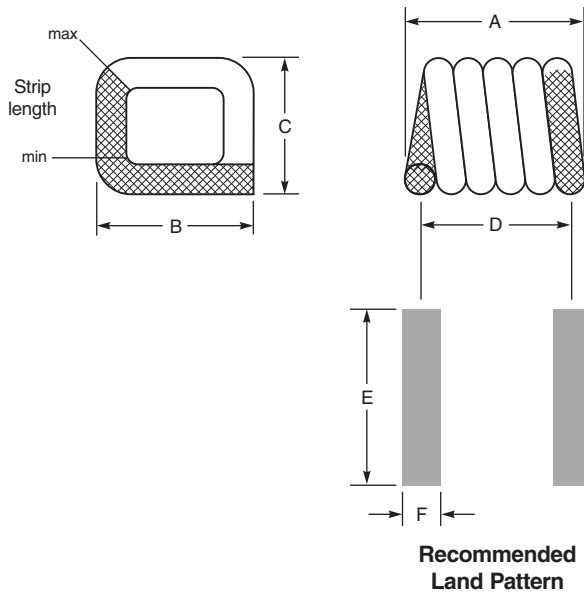
Square Air Coil Inductors

S-Parameter files

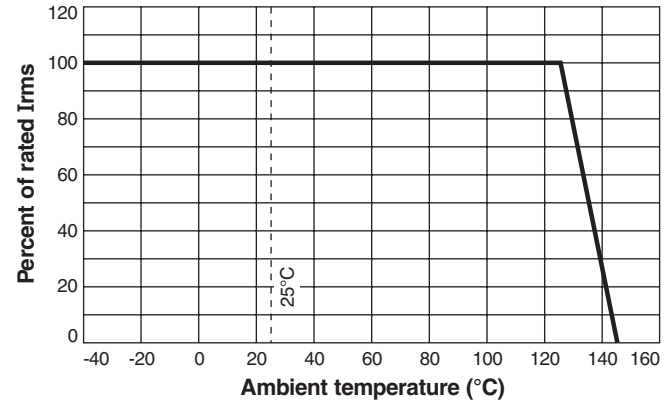
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SPICE models

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Irms Derating



Packaging 2000/7" reel; 7500/13" reel
Plastic tape: 12 mm wide, 0.254 mm thick, 4 mm pocket spacing

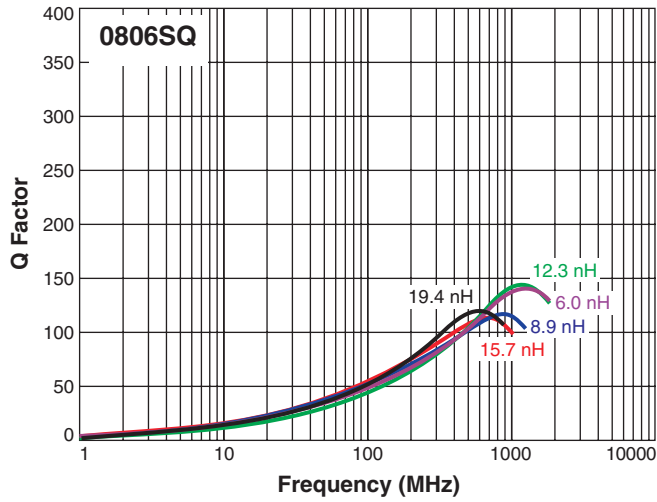
| Part number | A | B | C | D | E | F | Weight (mg) | Tape pocket depth (mm) |
|-------------|--------------|--------------|--------------|-------|-----|------|-------------|------------------------|
| 0806SQ-5N5 | 1,346 ±0,102 | 1,829 ±0,254 | 1,397 ±0,102 | 0,962 | 2,6 | 0,51 | 9,9 | 1,42 |
| 0806SQ-6N0 | 1,295 ±0,102 | 1,829 ±0,254 | 1,397 ±0,102 | 1,02 | 2,6 | 0,51 | 8,5 | 1,42 |
| 0806SQ-8N9 | 1,626 ±0,152 | 1,829 ±0,254 | 1,397 ±0,102 | 1,32 | 2,6 | 0,51 | 10,8 | 1,55 |
| 0806SQ-12N | 1,930 ±0,152 | 1,829 ±0,254 | 1,397 ±0,102 | 1,63 | 2,6 | 0,51 | 13,6 | 1,52 |
| 0806SQ-16N | 2,286 ±0,152 | 1,829 ±0,254 | 1,397 ±0,102 | 1,96 | 2,6 | 0,51 | 16,1 | 1,50 |
| 0806SQ-19N | 2,591 ±0,152 | 1,829 ±0,254 | 1,397 ±0,102 | 2,29 | 2,6 | 0,51 | 18,7 | 1,55 |
| <hr/> | | | | | | | | |
| 0807SQ-6N9 | 1,295 ±0,102 | 1,829 ±0,254 | 1,524 ±0,254 | 1,02 | 2,6 | 0,51 | 9,1 | 1,60 |
| 0807SQ-10N | 1,626 ±0,152 | 1,829 ±0,254 | 1,524 ±0,254 | 1,32 | 2,6 | 0,51 | 11,5 | 1,57 |
| 0807SQ-11N | 1,549 ±0,152 | 1,829 ±0,254 | 1,524 ±0,254 | 1,24 | 2,6 | 0,51 | 11,5 | 1,55 |
| 0807SQ-14N | 1,930 ±0,152 | 1,829 ±0,254 | 1,524 ±0,254 | 1,63 | 2,6 | 0,51 | 14,0 | 1,60 |
| 0807SQ-17N | 2,286 ±0,152 | 1,829 ±0,254 | 1,524 ±0,254 | 1,96 | 2,6 | 0,51 | 16,8 | 1,68 |
| 0807SQ-22N | 2,591 ±0,152 | 1,829 ±0,254 | 1,524 ±0,254 | 2,29 | 2,6 | 0,51 | 19,4 | 1,68 |
| <hr/> | | | | | | | | |
| 0908SQ-8N1 | 1,473 ±0,152 | 2,134 ±0,152 | 1,829 ±0,203 | 1,12 | 2,8 | 0,64 | 12,8 | 2,01 |
| 0908SQ-12N | 1,854 ±0,152 | 2,134 ±0,152 | 1,829 ±0,203 | 1,45 | 2,8 | 0,64 | 16,9 | 1,96 |
| 0908SQ-14N | 1,549 ±0,152 | 2,134 ±0,152 | 1,829 ±0,203 | 1,24 | 2,8 | 0,64 | 13,5 | 1,52 |
| 0908SQ-17N | 2,210 ±0,152 | 2,134 ±0,152 | 1,829 ±0,203 | 1,83 | 2,8 | 0,64 | 21,1 | 2,01 |
| 0908SQ-22N | 2,565 ±0,152 | 2,134 ±0,152 | 1,829 ±0,203 | 2,18 | 2,8 | 0,64 | 24,7 | 1,98 |
| 0908SQ-23N | 2,235 ±0,152 | 2,134 ±0,152 | 1,829 ±0,203 | 1,90 | 2,8 | 0,64 | 19,2 | 1,98 |
| 0908SQ-25N | 2,972 ±0,152 | 2,134 ±0,152 | 1,829 ±0,203 | 2,57 | 2,8 | 0,64 | 27,6 | 2,01 |
| 0908SQ-27N | 2,972 ±0,152 | 2,134 ±0,152 | 1,829 ±0,203 | 2,57 | 2,8 | 0,64 | 28,7 | 2,01 |

All dimensions are in mm.

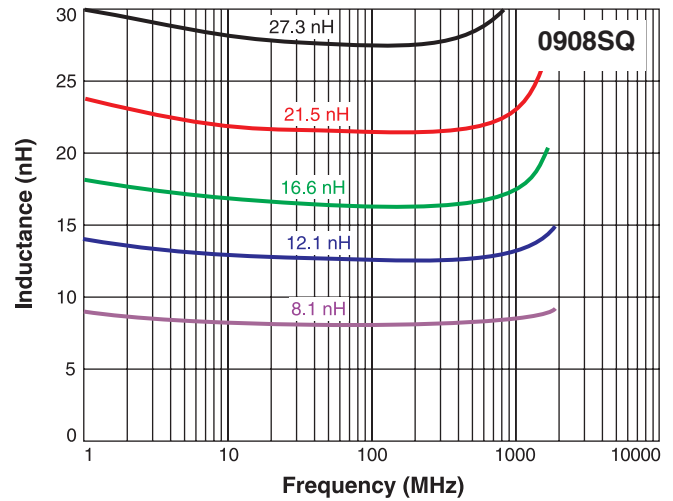
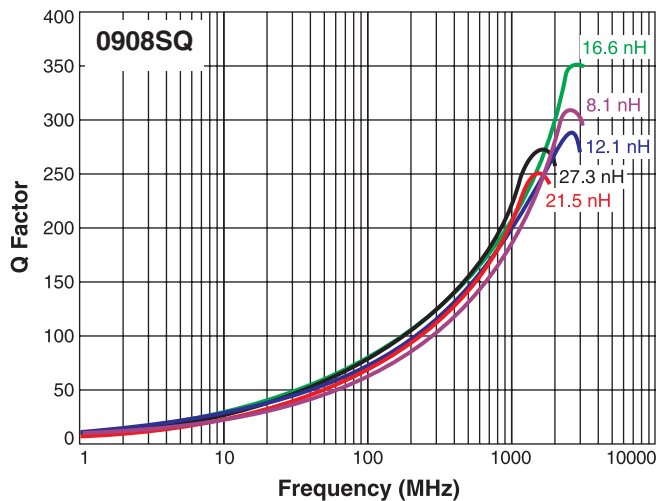
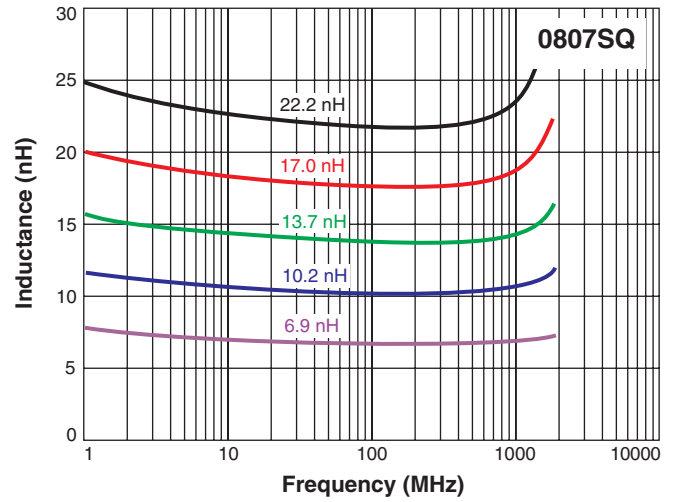
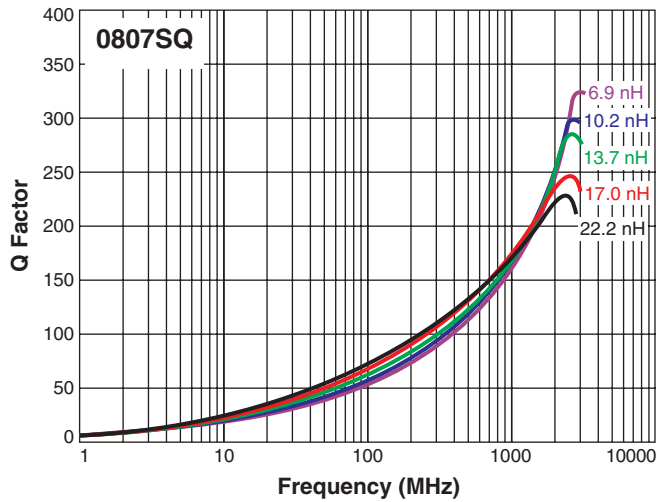
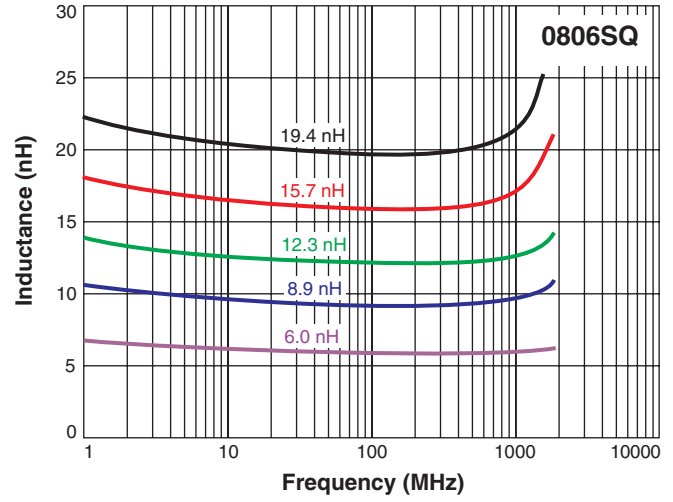


Square Air Coil Inductors

Typical Q vs Frequency



Typical L vs Frequency



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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