NEW!

Chip Inductors – 0402PA Series (1005)

With current ratings as high as 1.8 A, Coilcraft's 0402PA wirewound chip inductors are ideal for power amplifiers in TDMA, CDMA, GSM and other wireless applications.

Compared to our standard 0402CS Series, they can handle up to 65% more current and have half the DC resistance. These inductors are perfect for use as an RF choke for the power supply, the LC tank between amplifier and antenna and in the amplifier bias circuit. Like our other ceramic chip inductors, they feature outstanding self-resonant frequencies and excellent Q values. Most values are available in 2% inductance tolerance.

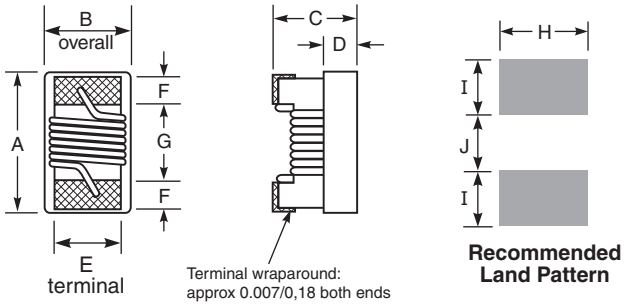
Coilcraft **Designer's Kit C373** contains samples of all 5% inductance tolerance parts. To order, contact Coilcraft or visit **http://order.coilcraft.com.**

Part number[1]	Inductance[2] (nH)	Percent tolerance[3]	900 MHz L typ	900 MHz Q typ[4]	1.7 GHz L typ	1.7 GHz Q typ[4]	SRF typ[5] (MHz)	DCR typ[6] (Ohms)	Irms[7] (mA)
0402PA-0N8X_L_	0.78	**5**	0.79	35	0.76	55	15200	0.018	1860
0402PA-1N9X_L_	1.9	**5,2**	1.83	50	1.81	73	12500	0.022	1700
0402PA-3N4X_L_	3.4	**5,2**	3.36	51	3.33	93	7200	0.030	1500
0402PA-3N5X_L_	3.5	**5,2**	3.51	58	3.55	82	8750	0.040	1400
0402PA-5N8X_L_	5.8	**5,2**	5.76	56	5.70	83	5450	0.045	1300
0402PA-6N2X_L_	6.2	**5,2**	6.17	57	6.28	81	4950	0.055	1150
0402PA-8N2X_L_	8.2	**5,2**	8.15	58	8.19	82	4650	0.060	1100

1. When ordering, specify **tolerance, termination** and **packaging** codes:
   0402PA-8N2X J L W
   Tolerance: **G** = 2% **J** = 5%
   Termination: **L** = RoHS compliant silver-palladium-platinum-glass frit Special order: **T** = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).
   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 test fixture and Coilcraft-provided correlation pieces with an Agilent/HP 4286 impedance analyzer.
3. Tolerances in bold are stocked for immediate shipment.
4. Q measured using an Agilent/HP 4291A with an Agilent/HP 16193 test fixture.
5. For SRF >6 GHz, measured using an Agilent/HP 8722ES network analyzer and a Coilcraft SMD-D test fixture. For SRF ≤6 GHz, measured using anAgilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
6. DCR measured on a micro-ohmmeter.
7. Current that causes a 15°C temperature rise from 25°C ambient.
8. **Ambient temperature range:** –40°C to +125°C with Irms current +125°C to +140°C with derated current
9. **Storage temperature range:** Component: –40°C to +140°C Packaging: –55°C to +80°C
10. **Resistance to soldering heat:** Three reflows at >217°C for 90 seconds (+260°C ±5°C for 20 – 40 seconds), allowing parts to cool to room temperature between.
11. Electrical specifications at 25°C.
12. Temperature coefficient of inductance: +25 to +125 ppm/°C.

See Qualification Standards section for environmental and test data.

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



A max	B max	C max	D ref	E	F	G	H	I	J	
0.047	0.025	0.026	0.010	0.020	0.009	0.022	0.026	0.014	0.018	inches
1,19	0,64	0,66	0,25	0,51	0,23	0,56	0,66	0,36	0,46	mm

Weight: 0.9 – 1.1 mg
Tape and reel: 2000/7″ reel 8 mm tape width
For packaging data see Tape and Reel Specifications section.

Coilcraft®

Specifications subject to change without notice.
Please check our website for latest information. Document 347-1 Revised 09/21/07

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NEW!

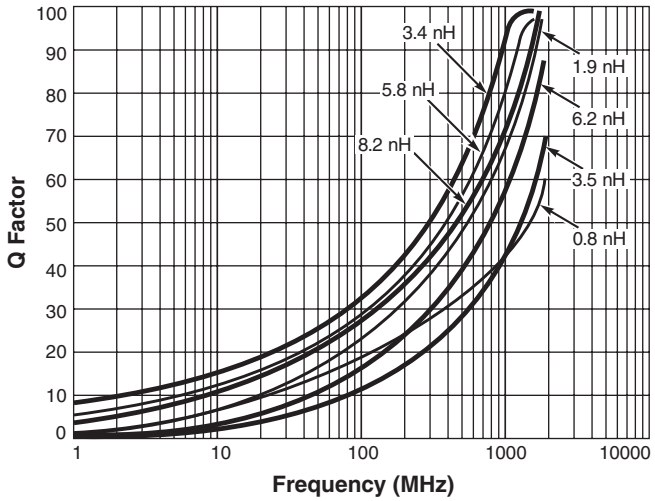
RoHS COMPLIANT

0402PA Series (1005)

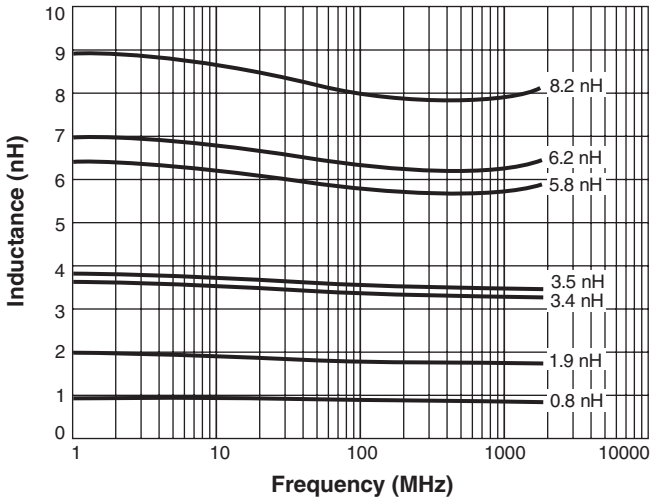
S-Parameter files
ON OUR WEB SITE OR CD

SPICE models
ON OUR WEB SITE OR CD

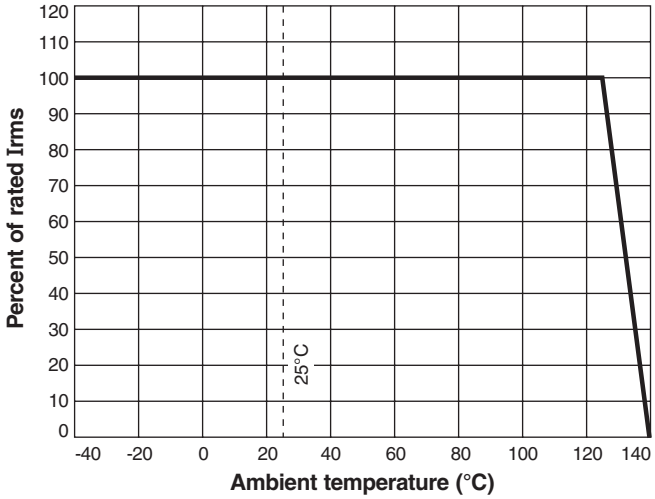
Typical Q vs Frequency



Typical L vs Frequency



Irms Derating



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