

PE-0402CL4N7STT Datasheet

www.digi-electronics.com



DiGi Electronics Part Number	PE-0402CL4N7STT-DG
Manufacturer	Pulse Electronics
Manufacturer Product Number	PE-0402CL4N7STT
Description	FIXED IND 4.7NH 300MA 200MOHM SM
Detailed Description	4.7 nH Unshielded Multilayer Inductor 300 mA 200m Ohm Max 0402 (1005 Metric)

<https://www.DiGi-Electronics.com>



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

PE-0402CL4N75TT

Series:

PE-0402CL

Type:

Multilayer

Inductance:

4.7 nH

Current Rating (Amps):

300 mA

Shielding:

Unshielded

Q @ Freq:

8 @ 100MHz

Ratings:

-

Inductance Frequency - Test:

100 MHz

Mounting Type:

Surface Mount

Supplier Device Package:

0402

Height - Seated (Max):

0.022" (0.55mm)

Manufacturer:

Pulse Electronics

Product Status:

Active

Material - Core:

Ceramic

Tolerance:

±0.3nH

Current - Saturation (Isat):

-

DC Resistance (DCR):

200mOhm Max

Frequency - Self Resonant:

4GHz

Operating Temperature:

-55°C ~ 125°C

Features:

-

Package / Case:

0402 (1005 Metric)

Size / Dimension:

0.039" L x 0.020" W (1.00mm x 0.50mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

Ceramic RF Chip Inductors

PE-0402CL Series



- Ⓢ Monolithic inorganic material construction
- Ⓢ Low DC resistance, high Q Values at high frequency
- Ⓢ High Self Resonant Frequency
- Ⓢ Industry Standard 0402 (1005) Surface Mount Land Pattern
- Ⓢ Operational temperature -55°C to +125°C

Electrical Specifications @ 25°C - Operating Temperature -40°C to +85°C

Part Number	Inductance ¹ (nH)	Standard Tolerance	Q ² (Min.)	Test Frequency (MHz)	SRF ³ (MHz MIN)	Roc ⁴ (Ω MAX)	I _{bc} ⁵ (mA MAX)
PE-0402CL1N0STT	1.0	±0.3nH (S)	8	100	10000	0.1	400
PE-0402CL1N2STT	1.2	±0.3nH (S)	8	100	10000	0.1	400
PE-0402CL1N5STT	1.5	±0.3nH (S)	8	100	6000	0.1	300
PE-0402CL1N8STT	1.8	±0.3nH (S)	8	100	6000	0.1	300
PE-0402CL2N0STT	2.0	±0.3nH (S)	8	100	6000	0.2	300
PE-0402CL2N2STT	2.2	±0.3nH (S)	8	100	6000	0.2	300
PE-0402CL2N7STT	2.7	±0.3nH (S)	8	100	6000	0.2	300
PE-0402CL3N3STT	3.3	±0.3nH (S)	8	100	6000	0.2	300
PE-0402CL3N6STT	3.6	±0.3nH (S)	8	100	4000	0.2	300
PE-0402CL3N9STT	3.9	±0.3nH (S)	8	100	4000	0.2	300
PE-0402CL4N7STT	4.7	±0.3nH (S)	8	100	4000	0.2	300
PE-0402CL5N6STT	5.6	±0.3nH (S)	8	100	4000	0.3	300
PE-0402CL6N2STT	6.2	±0.3nH (S)	8	100	3900	0.3	300
PE-0402CL6N8JTT	6.8	±5% (J)	8	100	3900	0.3	300
PE-0402CL7N5JTT	7.5	±5% (J)	8	100	3700	0.4	300
PE-0402CL8N2JTT	8.2	±5% (J)	8	100	3600	0.4	300
PE-0402CL100JTT	10	±5% (J)	8	100	3200	0.4	300
PE-0402CL120JTT	12	±5% (J)	8	100	2700	0.5	300
PE-0402CL150JTT	15	±5% (J)	8	100	2300	0.5	300
PE-0402CL180JTT	18	±5% (J)	8	100	2100	0.5	300
PE-0402CL220JTT	22	±5% (J)	8	100	1900	0.6	300
PE-0402CL270JTT	27	±5% (J)	8	100	1600	0.7	300
PE-0402CL330JTT	33	±5% (J)	8	100	1300	0.8	200

Ceramic RF Chip Inductors

PE-0402CL Series



Mechanical Specification - Dimension in mm

Part Number	Inductance ¹ (nH)	Standard Tolerance	Q ² (Min.)	Test Frequency (MHz)	SRF ³ (MHz MIN)	Rdc ⁴ (Ω MAX)	Ibc ⁵ (mA MAX)
PE-0402CL470JTT	47	±5% (J)	8	100	1000	1.1	200
PE-0402CL560JTT	56	±5% (J)	8	100	750	1.2	200
PE-0402CL680JTT	68	±5% (J)	8	100	750	1.4	180
PE-0402CL820JTT	82	±5% (J)	8	100	750	2.4	150
PE-0402CL101JTT	100	±5% (J)	8	100	700	2.6	150
PE-0402CL121JTT	120	±5% (J)	8	100	600	2.8	150

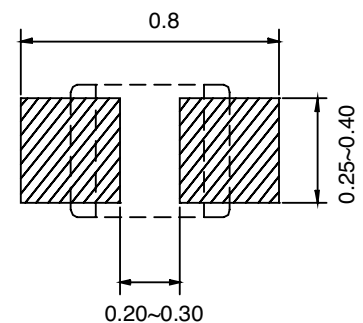
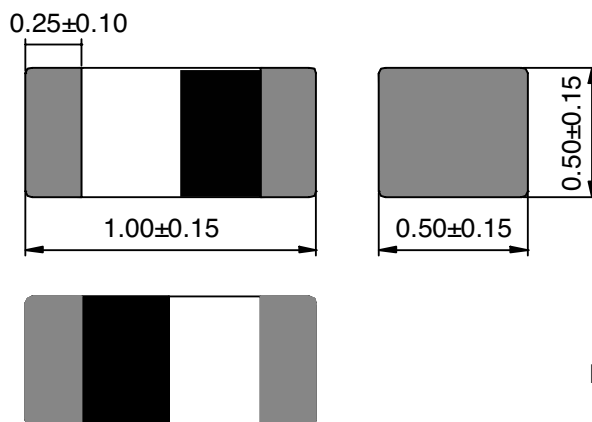
Notes:

- Inductance measured using a HP4286A RF Impedance Analyzer. (Please note that inductance information is not stamped on part, because of the extremely small size).
- Q measured using a HP4291A RF Impedance Analyzer with a HP16193A Test Fixture.
- SRF measured using a HP8753C Network Analyzer.
- RDC measured using a Valhalla Scientific model 4100 ATC Digital Ohm meter.
- Based on a 15°C maximum temperature rise.

Mechanical

Schematic

0402CL Series



Dimensions: $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified,
all tolerances are $\pm \frac{0.10}{0.25}$

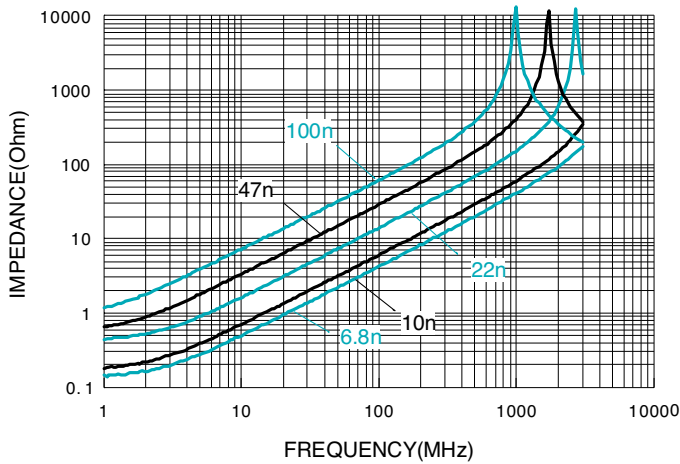
Ceramic RF Chip Inductors

PE-0402CL Series

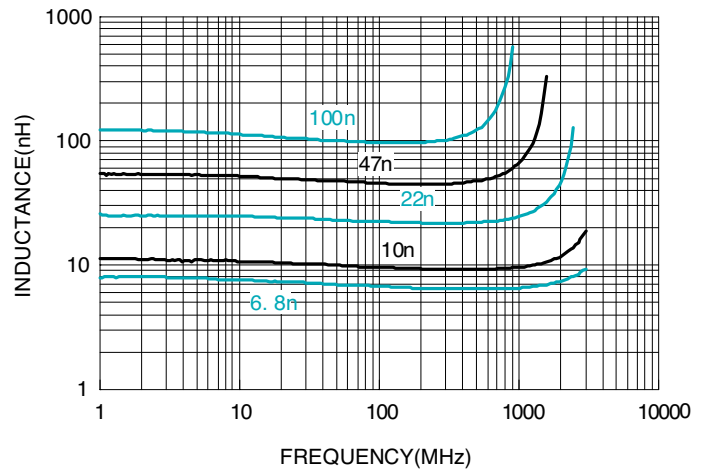
Characteristic Graphs

0402CL Series

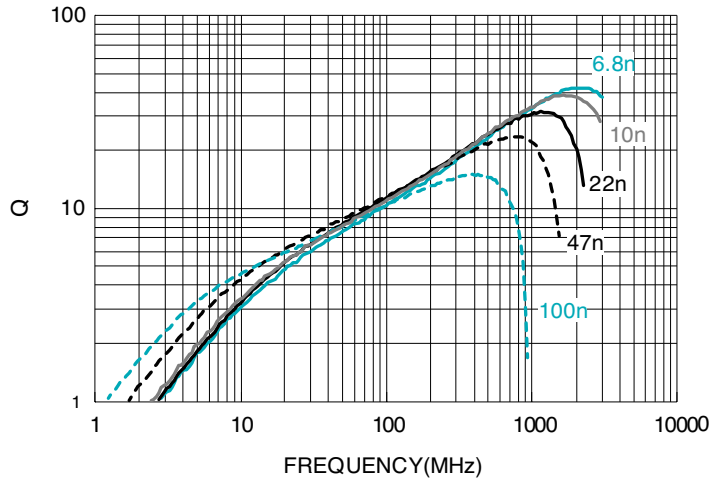
Impedance v.s. Frequency Characteristics



Inductance v.s. Frequency Characteristics



Q v.s. Frequency Characteristics



For More Information:

Americas - prod_info_network_americas@yageo.com | Europe - prod_info_network_emea@yageo.com | Asia - prod_info_network_apac@yageo.com

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2023. Pulse Electronics, Inc. All rights reserved.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.