






WIRE-WOUND RF CHIP INDUCTORS - 0402CD SERIES



-  Wirewound ceramic core construction
-  High Q values
-  High self resonant frequency
-  Industry standard 0402 (1005) surface mount land pattern
-  See page 3 for Competition Cross Reference



Electrical Specifications @ 25°C

Part Number	Inductance 1 (nH)	Standard Tolerance	Optional Tolerance	Q 2 (MIN)	SRF 3 (MHz MIN)	Roc (Ω MAX)	Ioc (mA MAX)
PE-0402CD1N0KTT	1.0 @ 250MHz	±0.3nH (S)	±0.2nH (B)	13 @ 250MHz	6000	0.045	1360
PE-0402CD1N2KTT	1.2 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	13 @ 250MHz	6000	0.060	1300
PE-0402CD1N8KTT	1.8 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	16 @ 250MHz	6000	0.070	1040
PE-0402CD1N9KTT	1.9 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	16 @ 250MHz	6000	0.070	1040
PE-0402CD2N0KTT	2.0 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	16 @ 250MHz	6000	0.070	1040
PE-0402CD2N2KTT	2.2 @ 250 MHz	±10% (K)	±5% (J), ±2% (G)	18 @ 250MHz	6000	0.070	960
PE-0402CD2N4KTT	2.4 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	18 @ 250MHz	6000	0.068	900
PE-0402CD2N7KTT	2.7 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	18 @ 250MHz	6000	0.120	860
PE-0402CD3N3KTT	3.3 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	6000	0.066	840
PE-0402CD3N6KTT	3.6 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	6000	0.066	840
PE-0402CD3N9KTT	3.9 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	5800	0.066	840
PE-0402CD4N3KTT	4.3 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	5800	0.091	640
PE-0402CD4N7KTT	4.7 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	4775	0.130	640
PE-0402CD5N1KTT	5.1 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	23 @ 250MHz	5800	0.083	800
PE-0402CD5N6KTT	5.6 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	23 @ 250MHz	5800	0.083	760
PE-0402CD6N2KTT	6.2 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	23 @ 250MHz	5800	0.083	760
PE-0402CD6N8KTT	6.8 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	5800	0.083	680
PE-0402CD7N5KTT	7.5 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	5800	0.104	680
PE-0402CD8N2KTT	8.2 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	4400	0.104	680
PE-0402CD8N7KTT	8.7 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	21 @ 250MHz	4100	0.200	680
PE-0402CD9N0KTT	9.0 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	4160	0.104	680
PE-0402CD9N5KTT	9.5 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	21 @ 250MHz	4000	0.200	600
PE-0402CD100KTT	10 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	21 @ 250MHz	3900	0.195	480
PE-0402CD110KTT	11 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	3680	0.120	640
PE-0402CD120KTT	12 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	3600	0.120	640
PE-0402CD130KTT	13 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	3450	0.210	600
PE-0402CD150KTT	15 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	3280	0.172	560
PE-0402CD160KTT	16 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	3100	0.220	560
PE-0402CD180KTT	18 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	3100	0.230	520
PE-0402CD190KTT	19 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	3040	0.202	480
PE-0402CD200KTT	20 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	3000	0.250	480
PE-0402CD220KTT	22 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	2800	0.300	400
PE-0402CD230KTT	23 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	2720	0.214	400
PE-0402CD240KTT	24 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	2700	0.300	400
PE-0402CD270KTT	27 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	2480	0.298	400

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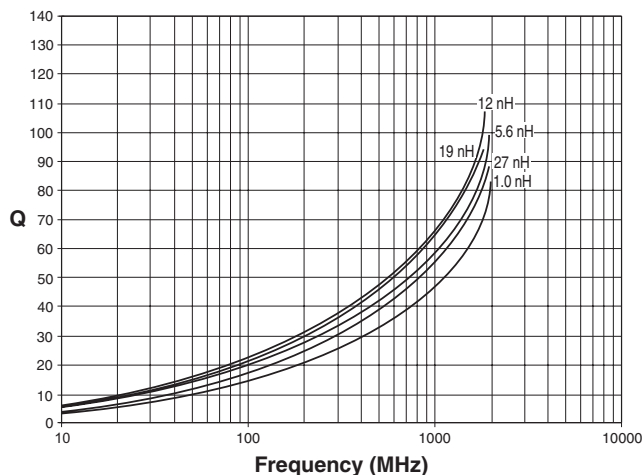
Electrical Specifications @ 25°C (continued)

Part Number	Inductance 1 (nH)	Standard Tolerance	Optional Tolerance	Q 2 (MIN)	SRF 3 (MHz MIN)	R _{DC} (Ω MAX)	I _{bc} (mA MAX)
PE-0402CD300KTT	30 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	2350	0.300	350
PE-0402CD330KTT	33 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	24 @ 250MHz	2350	0.350	350
PE-0402CD360KTT	36 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	2320	0.403	320
PE-0402CD390KTT	39 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	2100	0.550	320
PE-0402CD400KTT	40 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	26 @ 250MHz	2240	0.438	320
PE-0402CD430KTT	43 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	2030	0.810	240
PE-0402CD470KTT	47 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	2100	0.830	100
PE-0402CD510KTT	51 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	1750	0.820	100
PE-0402CD560KTT	56 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	22 @ 250MHz	1750	0.970	100
PE-0402CD680KTT	68 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	18 @ 250MHz	1840	0.970	100
PE-0402CD820KTT	82 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	16 @ 250MHz	1680	1.250	100
PE-0402CD101KTT	100 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	16 @ 250MHz	1620	2.600	100
PE-0402CD121KTT	120 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	14 @ 250MHz	1520	2.700	90

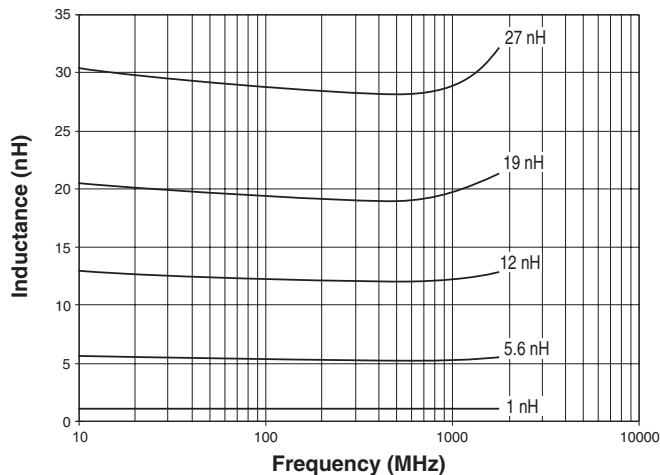
Notes:

- 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.
- R_{DC} measured using a Valhalla Scientific model 4100 ATC Digital Ohmmeter.
- Based on a 15°C maximum temperature rise.
- Sample Kit Part Number: **PE-0402CDKIT-T**
- Component Weight: 0.002 grams typical.

Typical Q vs Frequency



Typical Inductance vs Frequency



Mechanical

