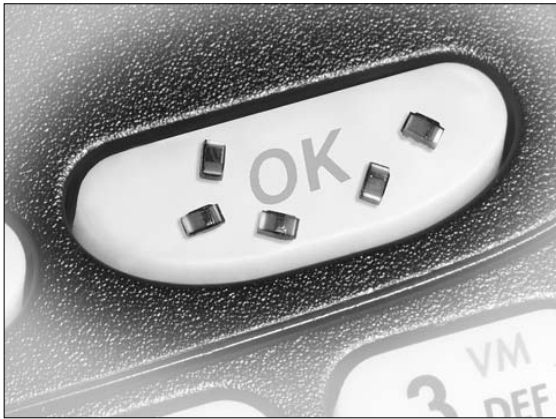







# WIRE-WOUND RF CHIP INDUCTORS - 0603CD SERIES



-  Wirewound ceramic core construction
-  High Q values
-  High self resonant frequency
-  Industry standard 0603 (1608) surface mount land pattern
-  See page 3 for Competition Cross Reference



## Electrical Specifications @ 25°C

Part Number	Inductance <sup>1</sup> (nH)	Standard Tolerance	Optional Tolerance	Q <sup>2</sup> (MIN)	SRF <sup>3</sup> (MHz MIN)	Rdc <sup>4</sup> (Ω MAX)	Ibc <sup>5</sup> (mA MAX)
PE-0603CD1N6KTT	1.6 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	24 @ 250MHz	>6000	0.030	700
PE-0603CD010KTT	1.7 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	16 @ 250MHz	>6000	0.050	700
PE-0603CD1N8KTT	1.8 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	16 @ 250MHz	>6000	0.045	700
PE-0603CD2N2KTT	2.2 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	18 @ 250MHz	>6000	0.110	700
PE-0603CD3N3KTT	3.3 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 250MHz	>6000	0.045	700
PE-0603CD3N6KTT	3.6 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	>6000	0.070	700
PE-0603CD030KTT	3.9 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	>6000	0.080	700
PE-0603CD4N3KTT	4.3 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	>6000	0.102	700
PE-0603CD040KTT	4.55 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	5800	0.106	700
PE-0603CD4N7KTT	4.7 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	5800	0.116	700
PE-0603CD5N1KTT	5.1 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 250MHz	5700	0.108	700
PE-0603CD5N6KTT	5.6 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	5500	0.108	700
PE-0603CD6N2KTT	6.2 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	5800	0.110	700
PE-0603CD060KTT	6.68 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 250MHz	5800	0.110	700
PE-0603CD6N8KTT	6.8 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	27 @ 250MHz	5800	0.110	700
PE-0603CD7N5KTT	7.5 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	28 @ 250MHz	4800	0.115	700
PE-0603CD080KTT	8.2 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	30 @ 250MHz	4600	0.120	700
PE-0603CD8N7KTT	8.7 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	28 @ 250MHz	4600	0.109	700
PE-0603CD9N5KTT	9.5 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	28 @ 250MHz	5400	0.135	700
PE-0603CD100KTT	10 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	30 @ 250MHz	4800	0.130	700
PE-0603CD110KTT	11 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	30 @ 250MHz	4000	0.086	700
PE-0603CD120KTT	12 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	30 @ 250MHz	4000	0.130	700
PE-0603CD130KTT	13 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	38 @ 250MHz	3600	0.106	700
PE-0603CD150KTT	15 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	30 @ 250MHz	4000	0.170	700
PE-0603CD160KTT	16 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 250MHz	3300	0.170	700
PE-0603CD180KTT	18 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 250MHz	3100	0.170	700
PE-0603CD220KTT	22 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 250MHz	3000	0.190	700
PE-0603CD230KTT	23 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	38 @ 250MHz	2850	0.190	700
PE-0603CD240KTT	24 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 250MHz	2650	0.200	600
PE-0603CD270KTT	27 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 250MHz	2800	0.220	600
PE-0603CD300KTT	30 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	37 @ 250MHz	2250	0.144	600
PE-0603CD330KTT	33 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 250MHz	2300	0.220	600
PE-0603CD360KTT	36 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	37 @ 250MHz	2080	0.250	600
PE-0603CD390KTT	39 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 250MHz	2200	0.250	600
PE-0603CD430KTT	43 @ 250MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 250MHz	2000	0.280	600
PE-0603CD470KTT	47 @ 200MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 200MHz	2000	0.280	600
PE-0603CD510KTT	51 @ 200MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 200MHz	1900	0.270	600
PE-0603CD560KTT	56 @ 200MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 200MHz	1900	0.310	600
PE-0603CD680KTT	68 @ 200MHz	±10% (K)	±5% (J), ±2% (G)	35 @ 200MHz	1700	0.340	600
PE-0603CD720KTT	72 @ 150MHz	±10% (K)	±5% (J), ±2% (G)	34 @ 150MHz	1700	0.490	400

(Continued on next page)

# WIRE-WOUND RF CHIP INDUCTORS - 0603CD SERIES



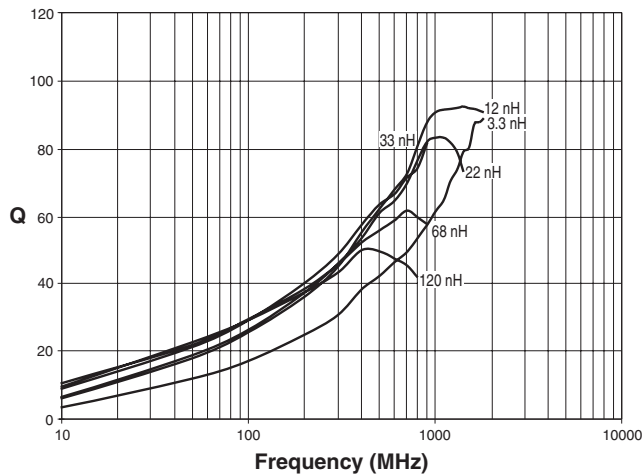
## Electrical Specifications @ 25°C (continued)

Part Number	Inductance <sup>1</sup> (nH)	Standard Tolerance	Optional Tolerance	Q <sup>2</sup> (MIN)	SRF <sup>3</sup> (MHz MIN)	R <sub>dc</sub> <sup>4</sup> (Ω MAX)	I <sub>dc</sub> <sup>5</sup> (mA MAX)
PE-0603CD820KTT	82 @ 150MHz	±10% (K)	±5% (J), ±2% (G)	34 @ 150MHz	1700	0.540	400
PE-0603CD101KTT	98.50 @ 150MHz	±10% (K)	±5% (J), ±2% (G)	34 @ 150MHz	1400	0.580	400
PE-0603CDR10KTT	100 @ 150MHz	±10% (K)	±5% (J), ±2% (G)	34 @ 150MHz	1400	0.580	400
PE-0603CD111KTT	110 @ 150MHz	±10% (K)	±5% (J), ±2% (G)	33 @ 150MHz	1300	0.610	300
PE-0603CDR12KTT	120 @ 150MHz	±10% (K)	±5% (J), ±2% (G)	32 @ 150MHz	1300	0.650	300
PE-0603CD121KTT	122 @ 150MHz	±10% (K)	±5% (J), ±2% (G)	33 @ 150MHz	1300	0.650	300
PE-0603CD151KTT	150 @ 150MHz	±10% (K)	±5% (J), ±2% (G)	28 @ 150MHz	990	0.920	280
PE-0603CD181KTT	180 @ 100MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 100MHz	990	1.250	240
PE-0603CD201KTT	200 @ 100MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 100MHz	900	1.980	240
PE-0603CD211KTT	210 @ 100MHz	±10% (K)	±5% (J), ±2% (G)	27 @ 100MHz	895	2.060	220
PE-0603CD221KTT	220 @ 100MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 100MHz	900	1.900	200
PE-0603CD251KTT	250 @ 100MHz	±10% (K)	±5% (J), ±2% (G)	25 @ 100MHz	822	3.550	180
PE-0603CD271KTT	270 @ 100MHz	±10% (K)	±5% (J), ±2% (G)	24 @ 100MHz	860	2.300	170
PE-0603CD331KTT	330 @ 100MHz	±10% (K)	±5% (J), ±2% (G)	22 @ 100MHz	500	2.300	150
PE-0603CD391KTT	390 @ 100MHz	±10% (K)	±5% (J), ±2% (G)	20 @ 100 MHz	350	2.900	130

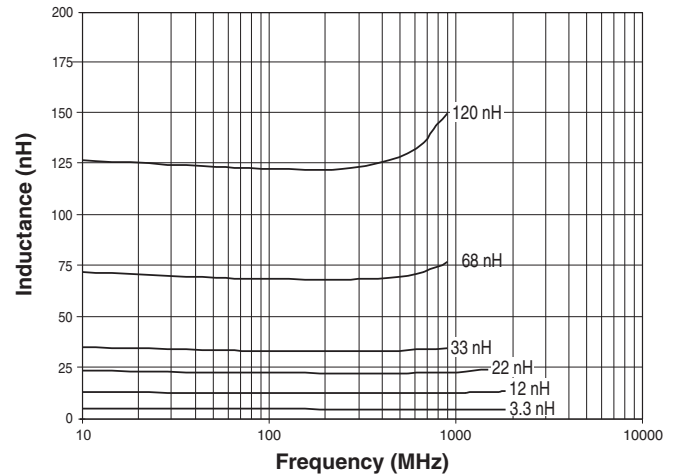
### Notes:

- Inductance measured using a HP4286A RF Impedance Analyzer.
- Q measured using a HP4291A RF Impedance Analyzer with a HP16193A Test Fixture.
- SRF measured using a HP8753C Network Analyzer.
- R<sub>DC</sub> measured using a Valhalla Scientific model 4100 ATC Digital Ohmmeter.
- Based on a 15°C maximum temperature rise.
- Sample Kit Part Number: **PE-0603CDKIT-T**
- Top side epoxy cap only.

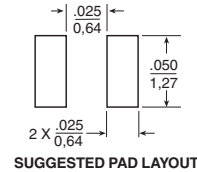
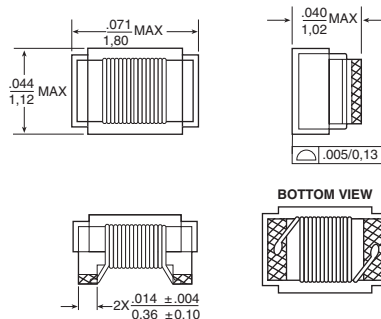
### Typical Q vs Frequency



### Typical Inductance vs Frequency



### Mechanical



Dimensions: Inches  
mm  
Unless otherwise specified  
all tolerances are ± .010  
0,25