






0603CD MINIATURE RF CHIP INDUCTORS

Designed for Wireless Products



-  Wirewound ceramic core construction
-  High Q values
-  High self resonant frequency
-  Tin/lead terminations
-  Industry standard 0603 (1608) surface mount land pattern

Electrical Specifications @ 25°C

Part Number	Inductance ¹ (nH)	Standard Tolerance	Optional Tolerance	Q ² (MIN)	SRF ³ (MHz MIN)	R _{DC} ⁴ (Ω MAX)	I _{DC} ⁵ (mA MAX)	900 MHz		1.7 GHz	
								(L TYP)	(Q TYP)	(L TYP)	(Q TYP)
PE-0603CD010KTT	1.8 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	17 @ 250 MHz	>6000	0.045	700	1.68	34	1.7	50
PE-0603CD030KTT	3.9 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	23 @ 250 MHz	>6000	0.080	700	3.85	49	4.0	69
PE-0603CD040KTT	4.7 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	20 @ 250 MHz	5800	0.116	700	3.85	49	4.0	69
PE-0603CD060KTT	6.8 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	29 @ 250 MHz	5800	0.110	700	6.8	58	7.1	79
PE-0603CD080KTT	8.2 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	31 @ 250 MHz	5000	0.120	700	8.2	62	8.7	77
PE-0603CD100KTT	10 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	35 @ 250 MHz	4800	0.130	700	10	64	10.8	84
PE-0603CD120KTT	12 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	35 @ 250 MHz	4000	0.130	700	12	70	13	85
PE-0603CD150KTT	15 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	36 @ 250 MHz	4000	0.170	700	16	72	17	87
PE-0603CD180KTT	18 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	35 @ 250 MHz	3100	0.170	700	19	71	22	114
PE-0603CD220KTT	22 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	41 @ 250 MHz	3000	0.190	700	23	83	27	128
PE-0603CD270KTT	27 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	40 @ 250 MHz	2800	0.220	600	28	86	34	129
PE-0603CD330KTT	33 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	40 @ 250 MHz	2300	0.220	600	36	67	51	42
PE-0603CD390KTT	39 @ 250 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	40 @ 250 MHz	2200	0.250	600	43	77	61	75
PE-0603CD470KTT	47 @ 200 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	41 @ 200 MHz	2000	0.280	600	53	66	85	38
PE-0603CD560KTT	56 @ 200 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	40 @ 200 MHz	1900	0.310	600	67	61	131	26
PE-0603CD680KTT	68 @ 200 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	37 @ 200 MHz	1700	0.340	600	82	52	210	14
PE-0603CD720KTT	72 @ 150 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	34 @ 150 MHz	1700	0.490	400	83	82	159	65
PE-0603CD820KTT	82 @ 150 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	34 @ 150 MHz	1700	0.540	400	100	77	250	34
PE-0603CD101KTT	100 @ 150 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	35 @ 150 MHz	1400	0.580	400	130	57	—	—
PE-0603CD111KTT	110 @ 150 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	33 @ 150 MHz	1350	0.610	300	150	64	—	—
PE-0603CD121KTT	120 @ 150 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	34 @ 150 MHz	1300	0.650	300	179	41	—	—
PE-0603CD151KTT	150 @ 150 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	28 @ 150 MHz	990	0.920	280	250	25	—	—
PE-0603CD181KTT	180 @ 100 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	25 @ 100 MHz	990	1.250	240	305	22	—	—
PE-0603CD221KTT	220 @ 100 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	25 @ 100 MHz	900	1.900	200	480	8	—	—
PE-0603CD271KTT	270 @ 100 MHz	+/-10% (K)	+/-5% (J), +/-2% (G)	24 @ 100 MHz	900	2.300	170	980	4	—	—

Notes:

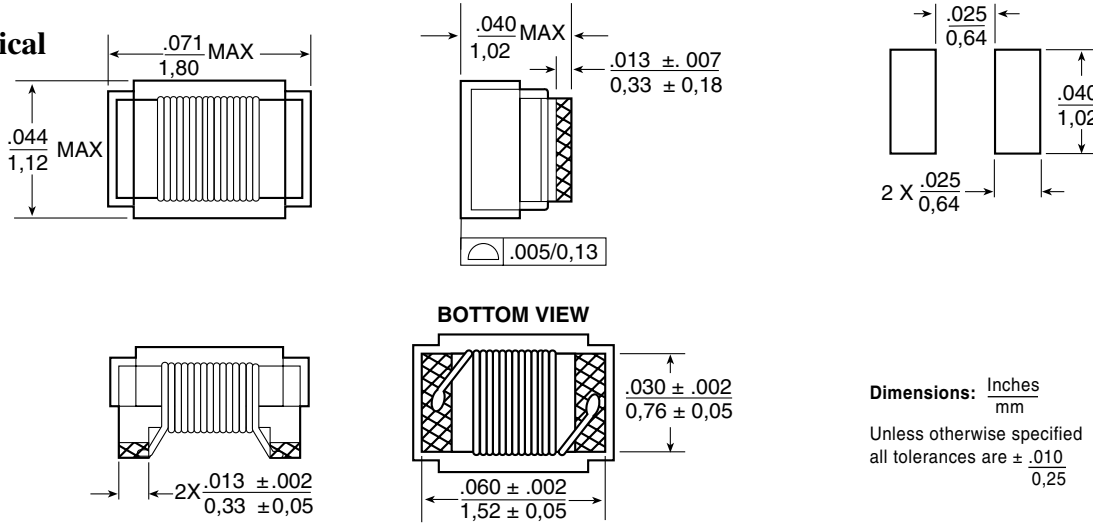
1. Inductance measured using a HP4286A RF Impedance Analyzer.
2. Q measured using a HP4291A RF Impedance Analyzer with a HP16193A Test Fixture.
3. SRF measured using a HP8753C Network Analyzer.
4. R_{DC} measured using a Valhalla Scientific model 4100 ATC Digital Ohmmeter.
5. Based on a 15°C maximum temperature rise.
6. Sample Kit Part Number: PE-0603CDKIT-T.
7. Component Weight: 0.003 grams typical.
8. S-Parameters and Q & inductance vs. frequency information available on the Pulse website: <http://www.pulseeng.com>.

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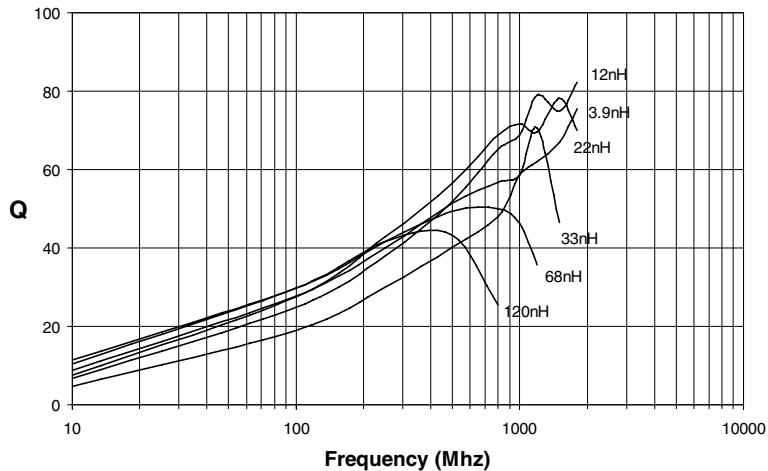
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Mechanical



Typical Q vs Frequency



Part Number Legend

EXAMPLE: 0603 Size, Ceramic Core, Standard Height, 120 nH, 10% Tolerance, Tape & Reel, Tin/Lead Termination

PE — 0603 C D

PACKAGE STYLE

CORE MATERIAL
C = Ceramic (Alumina)

121 K T T

INDUCTANCE (nH)
1st 2 digits are significant.
3rd digit is Multiplier.

TOLERANCE

F = $\pm 1\%$
G = $\pm 2\%$
J = $\pm 5\%$
K = $\pm 10\%$
M = $\pm 20\%$

TERMINATION

T = AgPd/Tin-Lead

PACKAGING

T = **Tape & Reel:** 2000 Pieces (7" reel/8mm wide)
B = Bulk/Partial Reel

For More Information :

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