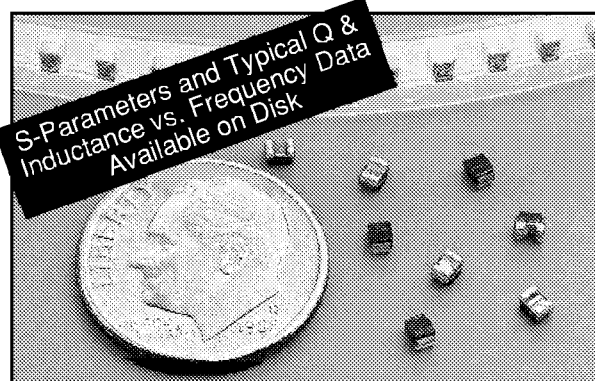


0805CX MINIATURE RF CHIP INDUCTORS

Designed for Wireless Products

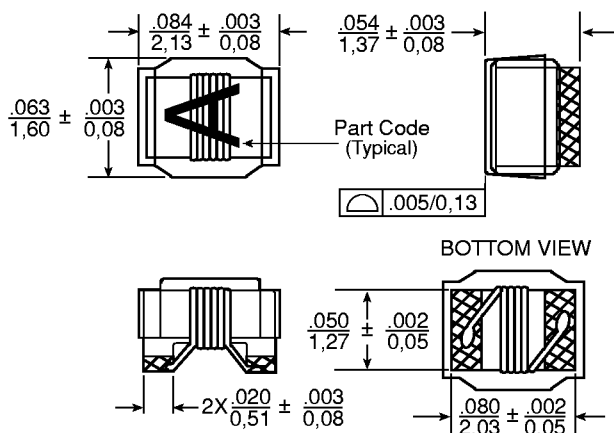


- Wirewound ceramic core construction
- High Q values and self-resonant frequency
- Gold terminations
- Industry standard 0805 (2012) surface mount land pattern

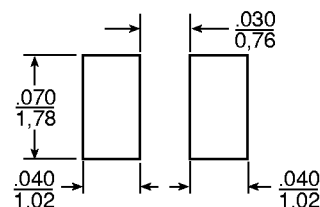
Electrical Specifications @ 25°C

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)	Part Code
PE-0805CX030KTG	3.3 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	37 @ 1500 MHz	5000	0.060	600	A
PE-0805CX060KTG	6.8 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	46 @ 1000 MHz	5000	0.150	600	B
PE-0805CX080KTG	8.2 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	47 @ 1000 MHz	3900	0.130	600	C
PE-0805CX120KTG	12 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	50 @ 500 MHz	2900	0.130	600	D
PE-0805CX150KTG	15 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	50 @ 500 MHz	2700	0.150	600	E
PE-0805CX180KTG	18 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	50 @ 500 MHz	2600	0.130	600	F
PE-0805CX220KTG	22 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	55 @ 500 MHz	2200	0.130	500	G
PE-0805CX270KTG	27 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	55 @ 500 MHz	2000	0.230	500	H
PE-0805CX330KTG	33 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	58 @ 500 MHz	1800	0.180	500	J
PE-0805CX390KTG	39 @ 250 MHz	± 10% (K)	±5%, ±2%, ±1%	60 @ 500 MHz	1600	0.230	500	K
PE-0805CX470KTG	47 @ 200 MHz	± 10% (K)	±5%, ±2%, ±1%	60 @ 500 MHz	1650	0.250	500	L
PE-0805CX560KTG	56 @ 200 MHz	± 10% (K)	±5%, ±2%, ±1%	60 @ 500 MHz	1300	0.160	500	M
PE-0805CX680KTG	68 @ 200 MHz	± 10% (K)	±5%, ±2%, ±1%	60 @ 500 MHz	1350	0.180	500	N
PE-0805CX820KTG	82 @ 150 MHz	± 10% (K)	±5%, ±2%, ±1%	60 @ 500 MHz	1300	0.360	400	O
PE-0805CX101KTG	100 @ 150 MHz	± 10% (K)	±5%, ±2%, ±1%	55 @ 500 MHz	1100	0.360	400	P
PE-0805CX121KTG	120 @ 150 MHz	± 10% (K)	±5%, ±2%, ±1%	45 @ 250 MHz	1100	0.560	350	R
PE-0805CX151KTG	150 @ 100 MHz	± 10% (K)	±5%, ±2%, ±1%	50 @ 250 MHz	900	0.560	350	S
PE-0805CX181KTG	180 @ 100 MHz	± 10% (K)	±5%, ±2%, ±1%	50 @ 250 MHz	875	0.690	300	T
PE-0805CX221KTG	220 @ 100 MHz	± 10% (K)	±5%, ±2%, ±1%	45 @ 250 MHz	800	0.850	300	U
PE-0805CX271KTG	270 @ 100 MHz	± 10% (K)	±5%, ±2%, ±1%	40 @ 100 MHz	800	0.900	300	X
PE-0805CX331KTG	330 @ 100 MHz	± 10% (K)	±5%, ±2%, ±1%	40 @ 100 MHz	775	1.300	300	Y
PE-0805CX391KTG	390 @ 100 MHz	± 10% (K)	±5%, ±2%, ±1%	40 @ 100 MHz	725	1.700	300	A1
PE-0805CX471KTG	470 @ 100 MHz	± 10% (K)	±5%, ±2%, ±1%	38 @ 100 MHz	600	3.250	240	B1
PE-0805CX561KTG	560 @ 100 MHz	± 10% (K)	±5%, ±2%, ±1%	40 @ 100 MHz	600	3.100	240	C1
PE-0805CX681KTG	680 @ 50 MHz	± 10% (K)	±5%, ±2%, ±1%	32 @ 50 MHz	550	3.500	240	D1

Mechanical



Suggested SMD Pad Layout



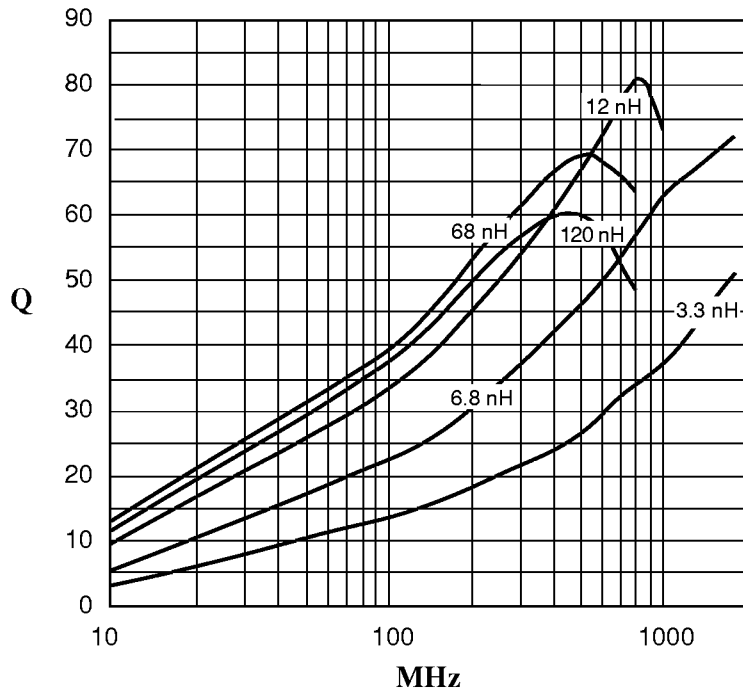
Weight 0.012 grams
Tape & Reel 2000/reel
Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified
all tolerances are $\pm \frac{.010}{0.25}$

0805CX MINIATURE RF CHIP INDUCTORS

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Typical Q vs. Frequency



NOTES:

1. Inductance measured using a HP4191A 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-0805CXKIT-G.
7. S-parameters and Q & Inductance vs. Frequency Information available on 3.5" disk. Please request **AN944-1**.

Part Number Legend

PE — **0805** **C** **X**

PACKAGE STYLE

CORE MATERIAL
C = Ceramic (Alumina)

PROFILE
X = Standard

121 **K** **T** **G**

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

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

TERMINATION
G = Tungsten/Nickel/Gold Flash

PACKAGING
T = Tape & Reel (2000 Pieces/
7" reel/8 mm wide tape/4 mm pitch)
B = Bulk/Partial Reel

EXAMPLE: 0805 Size, Ceramic Core, Standard Height, 120 nH, 10% Tolerance, Tape & Reel, Gold Termination

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