

WIRE-WOUND RF CHIP INDUCTORS



The 0402 to 1210 series range of Miniature Chip Inductors contains the very latest in wire-wound technology and Ceramic or Ferrite Core, thus providing the ultimate in performance demanded by today's Wireless products. The Inductors provide high Q and SRFs in an industry standard size and footprint.

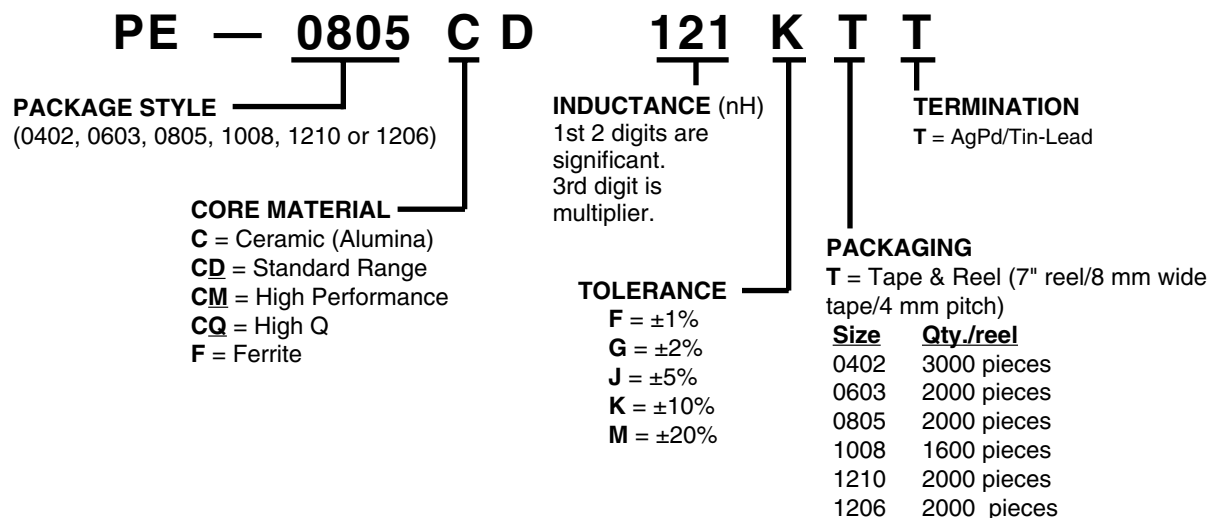
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WIRE-WOUND RF CHIP INDUCTORS



Part Number Legend



Design Kits Available from Pulse



Product KIT Series	Kit Part Number	Tolerance
0402CD Series	PE-0402CDKIT-T	5%
0603CD Series	PE-0603CDKIT-T	2%
0805CD Series	PE-0805CDKIT-T	2%
0805FT Series	PE-0805FTKIT-T	5%
1008CD Series	PE-1008CDKIT-T	2%
1008FD Series	PE-1008FDKIT-T	5%
1210FT Series	PE-1210FTKIT-T	5%
1206CD Series	PE-1206CDKIT-T	5%

NOTE: 0805CM, 1008CM and 1008CQ design kits are not available at this time.

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Selection Guides



Electrical Specifications

Part Number	Size	Construction	Inductance (nH)	1nH	10nH	100nH	1μH	10μH	33μH
0402CD	0402	Wirewound	1.0 to 120	█					
0603CD	0603	Wirewound	1.8 to 390		█				
0805CD	0805	Wirewound	3.3 to 1500		█				
0805CM	0805	Wirewound	3.3 to 680		█				
0805FT	0805	Wirewound	1000 to 68000				█		
1008CD	1008	Wirewound	4.7 to 5600		█				
1008CM	1008	Wirewound	4.7 to 4700		█				
1008CQ	1008	Wirewound	3.0 to 220		█				
1008FD	1008	Wirewound	150 to 10000			█			
1210FT	1210	Wirewound	10 to 12000		█				
1206CD	1206	Wirewound	3.3 to 1200		█				

CD Series: Standard 100% compatible with other market leaders.

CM Series: Offers improved electrical performance to Pulse CD series.

CQ Series: Offers high Q and high Idc series.

Competition Cross Reference

		Pulse Wire-wound Inductors								
Type	Competition	0402CD	0603CD	0805CD	0805FT	1008CQ	1008CD	1008FD	1210FT	1206CD
Wire Wound	Coilcraft	0402CS	0603CS	0805CS/ HS/HT		1008HQ	1008CS/ HT/CT	1008LS		1206CS
	Murata			LQW1608A			LQN21A			
	Taiyo Yuden			LB2012T			LEM_2520T			
	TDK				NL2016		NLH2520		NL3225	

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Performance Specifications



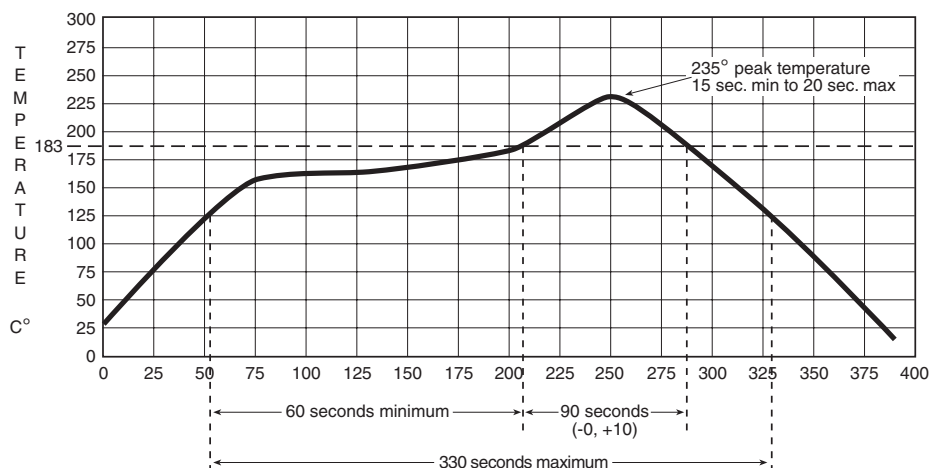
Environmental Testing

Storage and Operating Temperature Range: -40 to +125°C	Inductors are subjected to the extremes for 48 hours. Then tested at 25°C	There shall be no deformation or change in appearance
Thermal Shock: -40 to +85°C	Inductors are subjected to 30 cycles for 30 minutes at each extreme. Then tested at 25°C	Inductance shall not change by more than $\pm 5\%$
Moisture Resistance	Inductors are subjected to 10 cycles of 24 hours at 70°C with 90 to 95% Relative Humidity Then tested at 25°C	Q values shall not change by more than $\pm 10\%$
Operating Life	Inductors are subjected to 1000 hours at 85°C with 85% Relative Humidity with the rated current applied	There shall be no Damaged, Open or Shorted Windings

Mechanical Testing

Temperature Range:	Inductors are subjected to the following: Use a solder pot at 260°C, with RMA Flux. Each termination is immersed in 63Sn/37Pb molten solder for 4 to 6 seconds.	There shall be no deformation or change in appearance Inductance shall not change by more than $\pm 5\%$ Q values shall not change by more than $\pm 10\%$
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Recommended Solder Heat Resistance Profile



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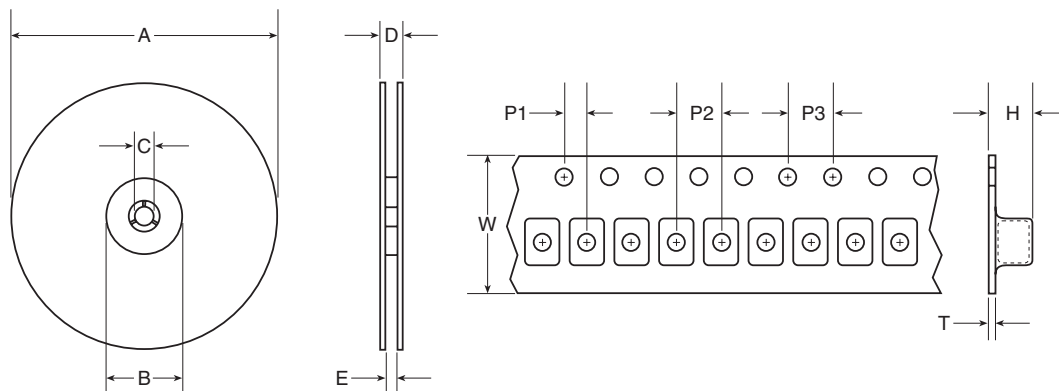
Performance Specifications



Mechanical Testing

Vibration (Random)	Samplers are subjected to random vibration as per NAVMAT P9492	There shall be no deformation or change in appearance Inductance shall not change by more than $\pm 5\%$ Q values shall not change by more than $\pm 10\%$
Mechanical Shock	Inductors are subjected to one half sine wave pulse (8700 g's for 0.3 ms) in each directional axis for a total of 18 shocks	
Moisture Resistance	Reflow Inductors on to test pads using 63 Sn/37 Pb solder paste (IR Reflow profile = 200°C for 30 seconds or peak 235°C for 20 seconds)	The inductors shall withstand a minimum force of 1000 g's in any direction using a dynamometer force guage.

Tape and Reel Specifications



Packaging Specifications

Series	Parts per Reel	Reel Dimensions (mm)					Tape Dimensions (mm)					
		A	B	C	D	E	W	P1	P2	P3	H	T
0402CD	3000	178	50	13	14.4	8.4	8	2	4	4	1.1	0.3
0603CD	2000	178	50	13	14.4	8.4	8	2	4	4	1.7	0.3
0805CD	2000	178	50	13	14.4	8.4	8	2	4	4	2.1	0.3
0805CM	2000	178	50	13	14.4	8.4	8	2	4	4	2.1	0.3
0805FT	2000	178	50	13	14.4	8.4	8	2	4	4	2.1	0.3
1008CD	1600	178	50	13	14.4	8.4	8	2	4	4	2.6	0.3
1008CM	1600	178	50	13	14.4	8.4	8	2	4	4	2.6	0.3
1008CQ	1600	178	50	13	14.4	8.4	8	2	4	4	2.6	0.3
1008FD	2000	178	50	13	14.4	8.4	8	2	4	4	2.6	0.3
1210FT	2000	330	50	13	18.4	14.4	12	8	4	2	4.0	0.3
1206CD	2000	178	50	13	14.4	8.4	8	2	4	4	2.1	0.3

NOTE: P1, P2 and P3 are same for all chip inductor series. Keeping the same dimensions for guide hole and pocket pitch (P1), pocket pitch (P2), guide hole pitch (P3) and tape width (8mm) for all series, enables the packaging machine to maintain the same settings while changing models. The only difference between the series are the parts per reel which contribute to a different length of tapes/reel per model.