CL

A Series

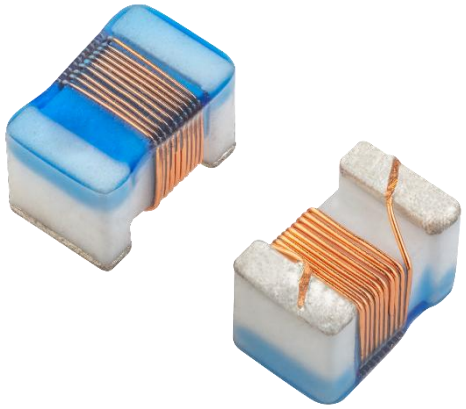
0805 Case Size

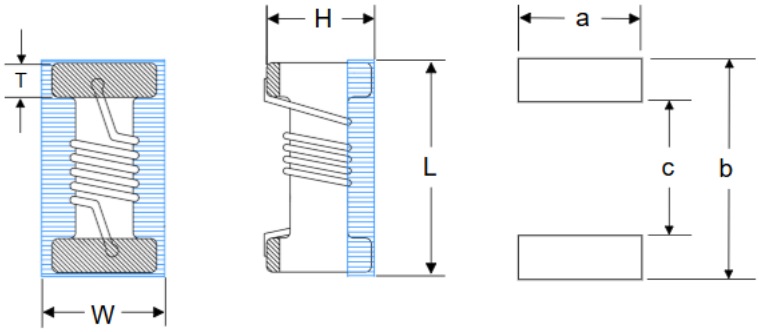
A Series Ceramic Core Inductors

These inductors provide reliable performance and consistent inductance across a broad frequency range, making them well suited for cost-sensitive and high-volume applications. Knowles designs focus on delivering competitive Q performance that meets industry standards while maintaining strong value and manufacturability.

Electrical Details	
Inductance Range	10nH to 4.7uH
Core Material	Ceramic
Termination: (J)	matte tin over nickel over silver
Termination: (2)*	matte tin over copper over silver
Operating Temp. Range	-55°c to +125°c
Environmental	RoHS Compliant, halogen Free

* Not currently available, contact sales for release schedule timeline.

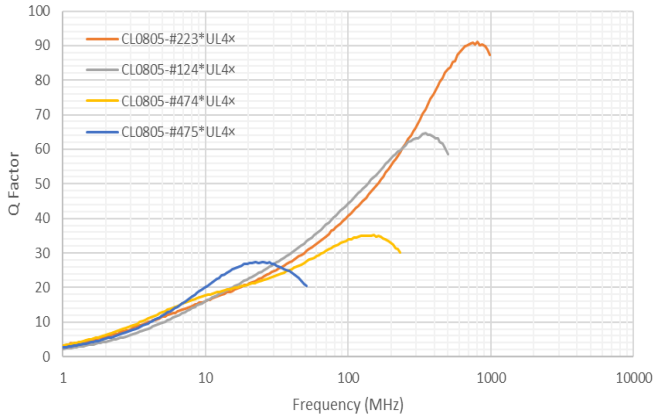




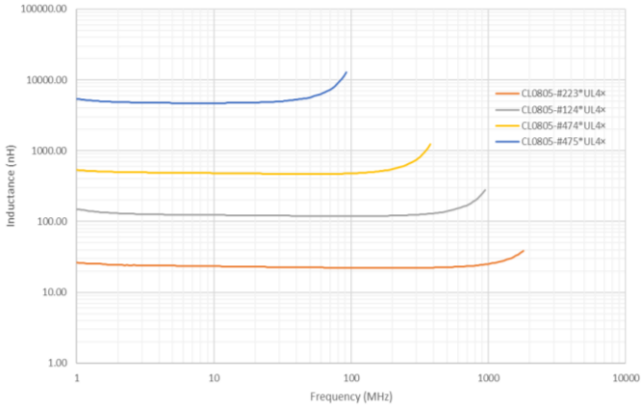
Reel Dia.		QTY
T	178mm 7"	2000
R	330mm 13"	10000

Dimension	L	H	W	T	a	b	c
mm	2.0	1.20	1.25	0.4	1.30	2.6	0.75
Inch	0.08	0.047	0.05	0.016	0.051	0.102	0.030
Tolerance	±0.2 ±0.008	±0.20 ±0.008	±0.25 ±0.01	±0.1 ±0.004	Recommended		

Q vs Frequency



L vs Frequency



Specifications

Part Number	Inductance	Tolerance	Q min	SRF Min (MHz)	DCR (Ohm) Max	Current rating 15°C (mA)
CL0805-#103*AL4×	10nH	* J (±5%), G (±2%)	60 (500MHz)	4800	0.080	600
CL0805-#123*AL4×	12nH	* J (±5%), G (±2%)	60 (500MHz)	4100	0.080	600
CL0805-#153*AL4×	15nH	* J (±5%), G (±2%)	60 (500MHz)	3600	0.080	600
CL0805-#183*AL4×	18nH	* J (±5%), G (±2%)	60 (500MHz)	3400	0.080	600
CL0805-#223*AL4×	22nH	* J (±5%), G (±2%)	60 (500MHz)	2800	0.100	600
CL0805-#273*AL4×	27nH	* J (±5%), G (±2%)	60 (500MHz)	2600	0.120	600
CL0805-#333*AL4×	33nH	* J (±5%), G (±2%)	60 (500MHz)	2400	0.150	500
CL0805-#393*AL4×	39nH	* J (±5%), G (±2%)	60 (500MHz)	2100	0.180	500
CL0805-#473*AL4×	47nH	* J (±5%), G (±2%)	60 (500MHz)	1700	0.150	500
CL0805-#563*AL4×	56nH	* J (±5%), G (±2%)	60 (500MHz)	1600	0.250	500
CL0805-#683*AL4×	68nH	* J (±5%), G (±2%)	60 (500MHz)	1450	0.270	500
CL0805-#823*AL4×	82nH	* J (±5%), G (±2%)	60 (500MHz)	1350	0.320	500
CL0805-#104*AL4×	100nH	* J (±5%), G (±2%)	60 (500MHz)	1200	0.430	500
CL0805-#124*AL4×	120nH	* J (±5%), G (±2%)	50 (250MHz)	1100	0.480	500
CL0805-#154*AL4×	150nH	* J (±5%), G (±2%)	50 (250MHz)	950	0.560	400
CL0805-#184*AL4×	180nH	* J (±5%), G (±2%)	50 (250MHz)	900	0.78	400
CL0805-#224*AL4×	220nH	* J (±5%), G (±2%)	50 (250MHz)	860	1	400
CL0805-#274*AL4×	270nH	* J (±5%), G (±2%)	45 (250MHz)	850	1.46	350
CL0805-#334*AL4×	330nH	* J (±5%), G (±2%)	45 (250MHz)	800	1.65	300
CL0805-#335*AL4×	3300nH	* J (±5%), G (±2%)	23 (25MHz)	130	9	100

Selected values from range, please contact sales for full list of inductance values.

Ordering information - *For Example: CL0805-103JAL4T*

CL0805	#	103	*	AL	4	x
Case Size	Termination	Inductance	Tolerance	Series	Version	Packaging
CL0805	-J Nickel barrier	See Chart	G: ± 2% J: ± 5%	AL - A Series		T 178mm / 7" R 330mm / 13"

Performance

Key Test	Test Condition (per AEC-Q200)	Min Specification
Temperature Cycling	-55°c to +125°c	1000 cycles
High Temperature Operating Life	+125°c, (powered)	1000 hr
Humidity Bias	85°c & 85%RH, (unpowered)	1000 hr, (<5% change in inductance)
High Temperature Storage	+125°c	1000 hr
Push Test	Termination Stress Test	1kg for 60 sec, no damage
Substrate Bend Test	2mm deflection of pcb	No damage