

CL Series

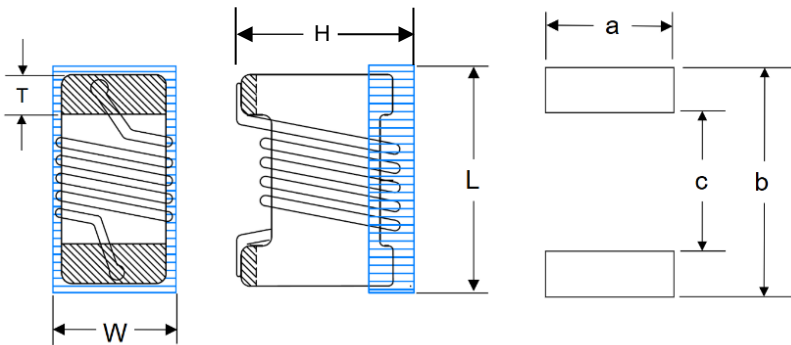
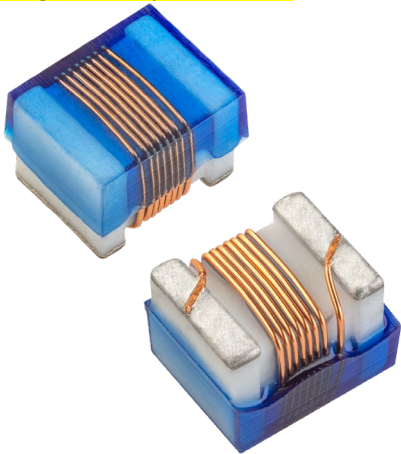
1008 Case Size



A Series Ceramic Core Inductors

These inductors deliver high energy efficiency and consistent inductance across a broad frequency range, making them ideal for designs in the medical and defence markets. Knowles can design inductors where Q meets or exceeds industry leader inductors. These designs are also non-magnetic and comply with MRI industry non-magnetic requirements.

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



Reel Dia.		QTY	Dimension				L	H	W	T	a	b	c
T	178mm	2000	mm	2.5	2.1	2.2	0.48	2.20	3.0	1.20			
	7"		0.1	0.082	0.087	0.019	0.087	0.118	0.047				
R	330mm	7000	Tolerance	±0.2	±0.2	±0.2	±0.05	Recommended					
	13"			±0.008	±0.008	±0.008	±0.002						

Specifications

Part Number	Inductance	Tolerance	Q min	SRF Min (MHz)	DCR (Ohm) Max	Current rating 15°C (mA)
CL1008-#103*UL4x	10	* J (±5%), G (±2%)	50 @ 500 MHz	3300	0.025	1902
CL1008-#124*UL4x	120	* J (±5%), G (±2%)	60 @ 350 MHz	900	0.099	1510
CL1008-#224*UL4x	220	* J (±5%), G (±2%)	45 @ 100 MHz	650	0.152	1154
CL1008-#394*UL4x	390	* J (±5%), G (±2%)	45 @ 100 MHz	500	0.332	606
CL1008-#125*UL4x	1200	* J (±5%), G (±2%)	35 @ 100 MHz	240	0.597	348
CL1008-#155*UL4x	1500	* J (±5%), G (±2%)	28 @ 50 MHz	200	0.641	341
CL1008-#185*UL4x	1800	* J (±5%), G (±2%)	28 @ 50 MHz	160	1.140	272
CL1008-#685*UL4x	6800	* J (±5%), G (±2%)	20 @ 7.9 MHz	40	3.133	125
CL1008-#825*UL4x	8200	* J (±5%), G (±2%)	20 @ 7.9 MHz	25	4.237	103
CL1008-#106*UL4x	10000	* J (±5%), G (±2%)	20 @ 7.9 MHz	20	5.906	78

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

Ordering information - *For Example: CL1008-103JUL4T*

CL1008	#	103	*	U	4	x
Case Size	Termination	Inductance	Tolerance	Series	Version	Packaging

CL1008 - 2 Copper barrier See Chart G: ±2%
J: ±5% U - CL 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

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This datasheet is for a standard item and is confirmed valid on the date generated, the latest published data for this part may differ and is available at <http://www.knowlescapacitors.com> or by contacting us.