

10.5mm

L42 SERIES

Inches/[mm]
±.010/[±.25]
2 x size

• Stable Inductance
• Very High and Stable Q
• Superior Temperature Stability
• Q vs Frequency Graph on Page 5
• Winding Capacity Table on Page 6
• Available as: Un-wound Hardware Only
• Quality Inspection Level: MIL-STD-1916 Level IV

ASSEMBLY PART NO.	COLOR CODE	MAGNETIC MATERIAL(1)	FREQUENCY RANGE(2)	MATERIAL PERMEABILITY	ASSEMBLY AL nH/turns ² (3)	MAX µH 100 turns	MIN µH (4) 100 turns	TEMPERATURE STABILITY(5)
L42-2-CT-F-2	RED	CARBONYL E	.25-1- MHZ	10.0	12.5	125	52	95 ppm/°C
L42-3-CT-F-2	GREY	CARBONYL HP	.02-1.0 MHZ	35.0	20.4	204	64	370 ppm/°C
L42-6-CT-F-2	YELLOW	CARBONYL E	2.0-50 MHZ	8.5	11.5	115	47	35 ppm/°C
L42-10-CT-F-2	BLACK	CARBONYL E	10-100 MHZ	6.0	10	100	46	150 ppm/°C
L42-17-CT-F-2	LAVENDER	CARBONYL E	20-200 MHZ	4.0	6.7	67	45	50 ppm/°C

1) The iron powder or ferrite materials are used in the tuning core and cup core.
 2) This represents the frequency range for Q optimization in tuned or resonant circuits. The inductive properties of the material is effective over a considerably wider frequency range.
 3) Nanohenries (10⁻⁹ Henries) per turn squared.
 4) The minimum inductance is measured in microhenries (10⁻⁶ Henries) per 100 turns with the tuning core tuned out of the winding area but still a part of the assembly.
 5) The temperature stability is of the magnetic material, measured in parts per million per degree Celsius (ppm/°C) on a toroidal core and winding. This is only an indication of the temperature stability for a complete wound assembly.

Assembly Sub-components

Actual Size

Inches/[mm]
±.010/[±.25]

5 TERMINAL ASSEMBLY (6)	COILFORM BASE ASSEMBLY (7)	BASE ONLY	BOBBIN WINDING FORM (8)	COLOR CODE	TUNNING CORE (9)	CUP CORE	SHIELD CAN
L42-2-CT-F-2	B342-w/CF120	B342	B342-w/PB142	RED	TH23-402	C12-4202	CN342CT
L42-3-CT-F-2	B342-w/CF120	B342	B342-w/PB142	GREY	TH23-403	C12-4203	CN342CT
L42-6-CT-F-2	B342-w/CF120	B342	B342-w/PB142	YELLOW	TH23-406	C12-4206	CN342CT
L42-10-CT-F-2	B342-w/CF120	B342	B342-w/PB142	BLACK	TH23-410	C12-4210	CN342CT
L42-17-CT-F-2	B342-w/CF120	B342	B342-w/PB142	LAVENDER	TH23-417	C12-4217	CN342CT

L42 WITH SNAP IN NYLON BOBBIN

L42(-)CT-B-2	B342-w/CF120	B342	B342-w/PB142	AS ABOVE	TH23-4()	C12-42()	CN342CT
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6) The base is molded in Rynite. The base will position two tinned winding leads up to #24 AWG (.200 Dia.) for IR reflow surface mounting directly to the printed circuit board. The CF120 coilform is glass reinforced polyester tube with 8-32 internal threads. Coplanarity is not an issue due to three contact points.
 7) The optional PB142 snap in bobbin is self threading polypropylene. To order, substitute "B" for "F" in the assembly part number.
 8) The tuning core is a 8-32 shallow thread coated with Teflon.