

8mm

Inches/[mm]
±.010/[±.25]
2 x size

L33 SERIES

Tuned Core
Fixed Cup

PHOTO NOT TO SCALE

- Stable Inductance
- 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/turn ² (3)	MAX μH 100 turns	MIN μH (4) 100 turns	TEMPERATURE STABILITY(5)
L33-1-CT-F-4	BLUE	CARBONYL C	.15-2.0 MHZ	20.0	7.6	76	45	280 ppm/°C
L33-2-CT-F-4	RED	CARBONYL E	.25-10 MHZ	10.0	6.8	68	45	95 ppm/°C
L33-3-CT-F-4	GREY	CARBONYL HP	.02-1.0 MHZ	35.0	8.0	80	46	370 ppm/°C
L33-6-CT-F-4	YELLOW	CARBONYL SF	2.0-50 MHZ	8.5	6.0	60	38	35 ppm/°C
L33-7-CT-F-4	WHITE	CARBONYL TH	1.0-20 MHZ	9.0	6.4	64	40	30 ppm/°C
L33-10-CT-F-4	BLACK	CARBONYL W	10-100MHZ	6.0	5.4	54	37	150 ppm/°C
L33-17-CT-F-4	LAVENDER	CARBONYL	20-200MHZ	4.0	4.8	48	37	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

B514-w/CF113

CF113

TH13-1()

C9-30()

CN401CT

4 TERMINAL ASSEMBLY	BASE ONLY (6)	WINDING FORM (7)	BASE ASSEMBLY	COLOR CODE	THREADED CORE (8)	CUP CORE	SHIELD CAN
L33-1-CT-F-4	B514	CF113	B514-w/CF113	BLUE	TH13-101	C9-3001	CN401CT
L33-2-CT-F-4	B514	CF113	B514-w/CF113	RED	TH13-102	C9-3002	CN401CT
L33-3-CT-F-4	B514	CF113	B514-w/CF113	GREY	TH13-103	C9-3003	CN401CT
L33-6-CT-F-4	B514	CF113	B514-w/CF113	YELLOW	TH13-106	C9-3006	CN401CT
L33-7-CT-F-4	B514	CF113	B514-w/CF113	WHITE	TH13-107	C9-3007	CN401CT
L33-10-CT-F-4	B514	CF113	B514-w/CF113	BLACK	TH13-110	C9-3010	CN401CT
L33-17-CT-F-4	B514	CF113	B514-w/CF113	LAVENDER	TH13-117	C9-3017	CN401CT

5 TERMINAL ASSEMBLY							
L33-()-CT-F-5	B515	CF113	B515-w/CF113	AS ABOVE	TH13-1()	C9-30()	CN401CT

6) The base is moulded from thermoset Diallyl Phthalate (DAP). The 4 or 5 terminals available are half hard brass, .024 inches in diameter, tin plated to MIL-STD 202 Method 208 for solderability. Optional base B524 is available with .050 standoffs.
 7) The coil form is a glass reinforced polyester tube with 6-32 internal threads.
 8) The tuning core is 6-32 shallow thread coated with Teflon.