

Tunable RF Inductors – 148 Series



With an overall height of only 0.300", these tunable coils are ideal for applications where low-profile circuit boards are essential.

The windings are precision molded in plastic to guarantee a constant winding pitch and a consistent relationship to the printed circuit board. Tuning is done by means of a threaded Carbonyl J core.

Coilcraft **Designer's Kit M304** contains three samples each of the values shown plus all values of the 132 Series of low-profile, high Q fixed inductors. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

COILCRAFT ACCURATE
PRECISION REPEATABLE
MEASUREMENTS
SEE WEB SITE **TEST FIXTURES**

Part number ¹	Color	Turns	Inductance (nH) ²				Q min ⁴ at L nom	Test freq (MHz)	No core SRF min (MHz)
			no core	min ³	nom	max ³			
148-01J12L	Brown	1½	35	38	39	40	88	50	3200
148-02J12L	Red	2½	44	46	52	58	96	50	1560
148-03J12L	Orange	3½	56	60	73	86	106	50	1200
148-04J12L	Yellow	4½	74	77	101	125	112	50	980
148-05J12L	Green	5½	92	96	130	164	112	50	820
148-06J12L	Blue	6½	114	120	170	220	112	50	720
148-07J12L	Violet	7½	142	154	222	290	110	50	620
148-08J12L	Gray	8½	168	176	262	346	106	25	570
148-09J12L	White	9½	198	208	310	410	104	25	490
148-10J12L	Black	10½	237	250	375	500	90	25	450
148-11J12L	Brown	11½	276	290	435	580	84	25	410
148-12J12L	Red	12½	315	338	500	666	66	25	350
148-13J12L	Orange	13½	344	362	540	710	64	25	320

- To order fixed inductance parts without cores, eliminate the "J12", e.g. 148-13L.
- Inductance readings taken at test frequency on an Agilent/HP 4342A Q meter with 1/2" long, 16 AWG tinned copper wire soldered along the leads and bent at 90°, 1/4" from standoffs. Inductance values at 50 MHz calculated from C_p readings. Inductance values at 25 MHz read at standard Q meter frequency (blue line).
- L min measured with core halfway out top of form. L max measured with core centered in the windings.
- Q readings taken on an Agilent/HP 4342A Q meter with 1/2" long, 16 AWG tinned copper wire soldered along the leads and bent at 90°, 1/4" from standoffs.
- Core material: Carbonyl J. Core length: 3/8".
- Operating temperature range -40°C to +85°C.
- Electrical specifications at 25°C.

Resistance to soldering heat: Wave solder only. Recommended maximum board surface temperature of 168°C (334°F) for no more than three seconds. Pre-heating is recommended to minimize time over the solder nozzle.



Weight: 0.7 – 1.2 g
Terminations: Tin-silver over copper
Packaging: 30 per tube



Coilcraft
www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore +65-6484 8412 sales@coilcraft.com.sg

Document 111 Revised 03/04/16

© Coilcraft Inc. 2016

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.