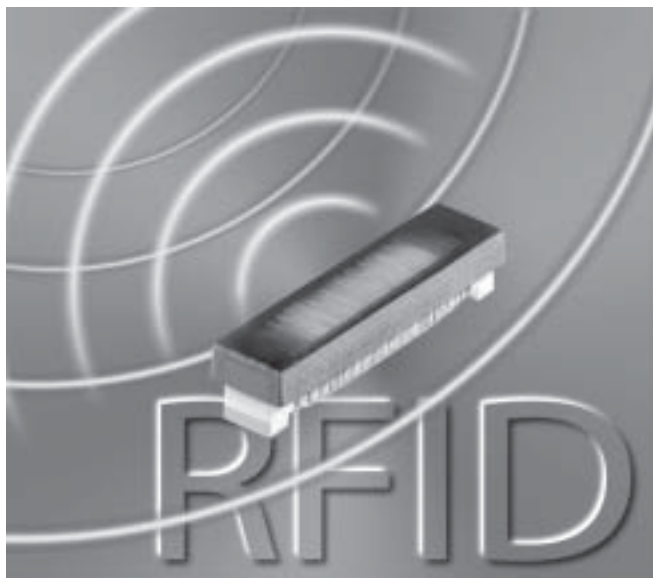


RFID Transponder Coils – 4308TC



Coilcraft's new family of antenna coils are rugged, high performance devices intended for RFID applications at 125 kHz.

These low profile parts have an extended length that allows longer read ranges and higher sensitivity. The coil is constructed of ferrite laminated onto a ceramic base, which makes it more rugged and impact resistant than all-ferrite constructions. An encapsulated top ensures reliable pick and place operations.

In addition to the standard models shown, Coilcraft can design transponder coils designed to operate at other frequencies.

Coilcraft **Designer's Kit C145** contains four samples of each value shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

Part Number	Inductance @125 kHz ¹ (mH) ±5%	Q min ¹	Matching capacitor ² (pF)	DCR max ³ (Ohms)	SRF min ⁴ (kHz)	Read distance ⁵ (inches/cm)	Color code
4308TC-404XJBD	0.40	15	4000	7.4	4500	51/104	Yellow Black Yellow
4308TC-904XJBD	0.90	15	1800	22	4000	56/142	White Black Yellow
4308TC-115XJBD	1.08	15	1500	25	4000	53/135	Brown Brown Green
4308TC-205XJBD	1.97	17	820	34	2400	60/152	Red Black Green
4308TC-245XJBD	2.38	17	680	39	2200	45/114	Red Yellow Green
4308TC-335XJBD	3.30	17	490	51	1800	75/191	Orange Orange Green
4308TC-415XJBD	4.15	17	390	74	1700	76/193	Yellow Brown Green
4308TC-495XJBD	4.90	17	330	96	1300	67/170	Yellow White Green
4308TC-685XJBD	6.80	17	240	112	1000	75/191	Blue Gray Green
4308TC-715XJBD	7.10	17	220	115	1000	76/193	Violet Brown Green
4308TC-815XJBD	8.10	17	200	123	960	76/193	Gray Brown Green

1. Inductance and Q measured using Agilent/HP 4192A impedance analyzer. For recommended test procedures, contact Coilcraft.

2. Matching capacitor value required for parallel resonant circuit operating at 125 kHz.

3. DCR measured on micro-ohmmeter.

4. SRF measured using Agilent/HP 8753D network analyzer.

5. Read distance measured using the KEELOQ® Transponder Evaluation Kit part number DM303005 from Microchip. Distance was recorded as the voltage across the resonant circuit dropped below 10 mV.

6. Operating temperature range -40°C to +85°C.

7. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

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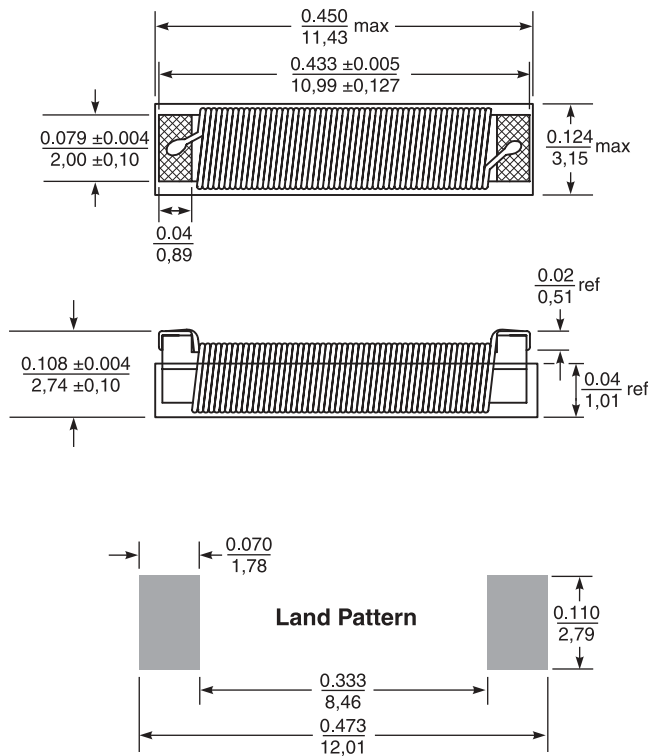
Specifications subject to change without notice. Document 223-1 Revised 12/18/02

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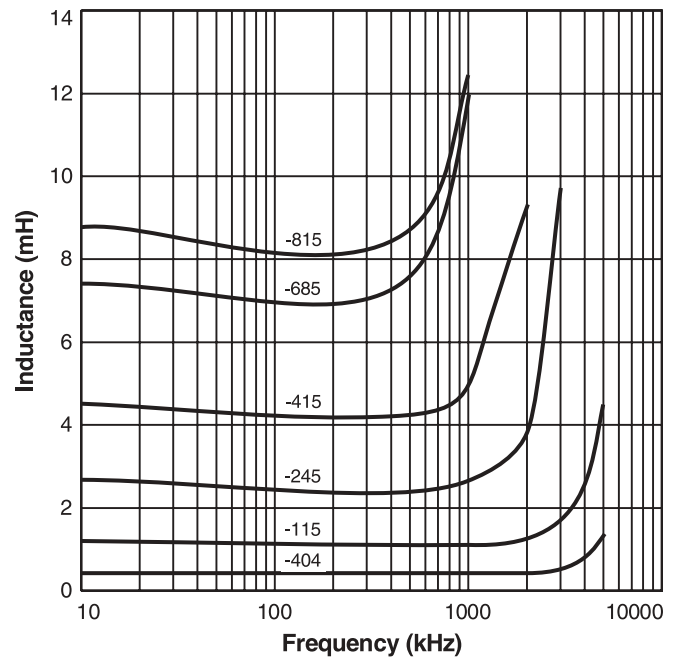
RFID Transponder Coils – 4308TC

Dimensions



Parts/reel: 13" 3000 Tape width: 24 mm
For packaging data see Tape and Reel Specifications section.

Typical L vs Frequency



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