



# Frontier Electronics Corp.

667 E. COCHRAN STREET, SIMI VALLEY, CA 93065

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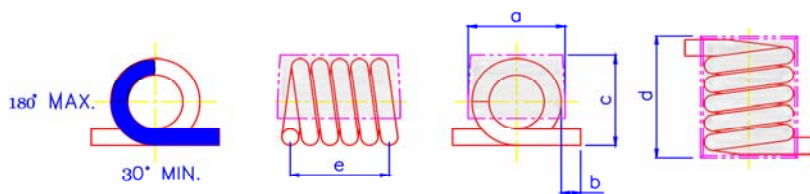
## SMD Air Wound Coils—291A & 291B series

### A. Electrical specification

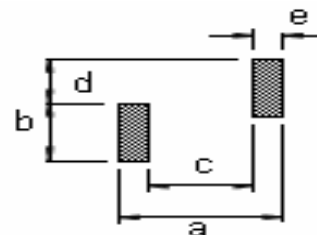
Part No.	Turns	L (nH)	Tolerance.	Q (Min.)	Test Freq.	DCR max. (mΩ)	SRF min. (GHz)	I DC (A max.)
291A-01	1	2.5	K	145	150 MHz	1.1	12.5	4
291A-02	2	5.0	K, J	140	150 MHz	1.8	6.5	4
291A-03	3	8.0	J, G	140	150 MHz	2.6	5.0	4
291A-04	4	12.5	J, G	137	150 MHz	3.4	3.3	4
291A-05	5	18.5	J, G	132	150 MHz	3.9	2.5	4
291B-06	6	17.5	J, G	100	150 MHz	4.5	2.2	4
291B-07	7	22.0	J, G	102	150 MHz	5.2	2.1	4
291B-08	8	28.0	J, G	105	150 MHz	6.0	1.8	4
291B-09	9	35.5	J, G	112	150 MHz	6.8	1.5	4
291B-10	10	43.0	J, G	106	150 MHz	7.9	1.2	4

### B. Mechanical dimensions: (Unit: mm)

Series No.	a	b	c	d	e
291A	3.05(MAX)	0.58±0.38	3.18(MAX)	3.68(MAX)	2.92±0.25
291B	3.05(MAX)	0.58±0.38	3.18(MAX)	6.86(MAX)	5.84±0.25



Mechanical dimension



Land Pattern

### C. Land Pattern: (Unit: mm)

Series No.	a	b	c	d	e
291A	4.19	3.30	1.65	2.79	1.27
291B	7.24	3.30	4.70	2.79	1.27

### D. Notes:

- Tolerance:
  - 291A-01: K = ± 10 % only.
  - 291A-02: J = ± 5 % or K = ± 10 %.
  - 291A-03 through 291A-05 and for 291B-06 through 291B-10: J = ± 5 % or G = ± 2 %
- Inductance & Q measured on the HP4291B with HP16193 test fixture.
- SRF measured on the HP8720D or HP8753E.
- Operating temp. : -40°C TO +125°C.
- For Temperature Rise: 15°C.
- Inductance Range:
  - 291A & 291B: From 2.5nH to 43.0nH. (@ 25°C.)
- Equivalent to Coilcraft's "Mini Spring" Air Core Inductor.
- RoHS** compliant.



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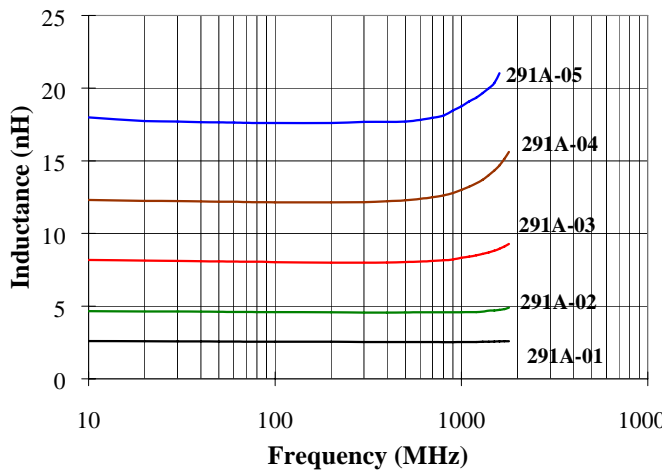
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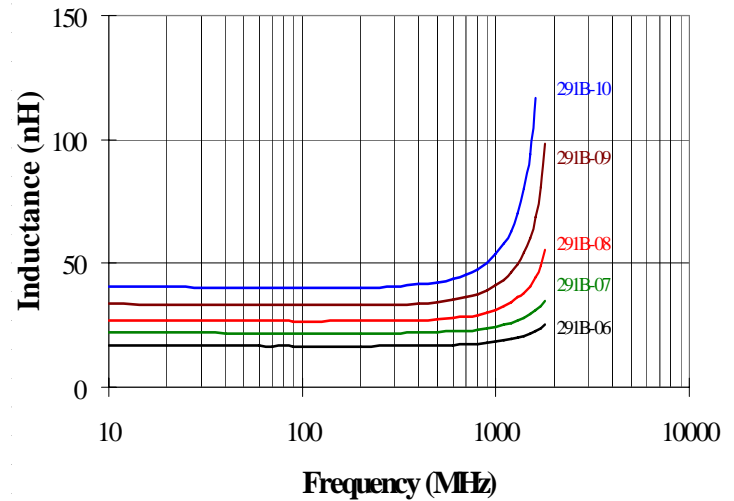
## SMD Air Wound Coils—291A & 291B series

### E. Characteristic curve:

#### 1. L vs. Frequency:

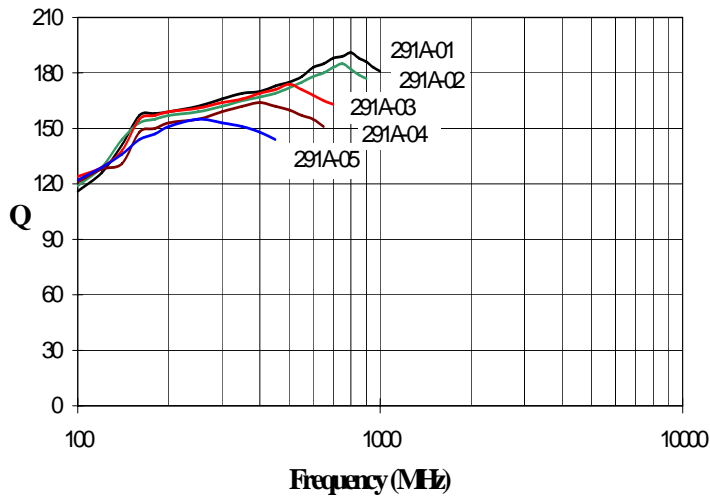


291A Series

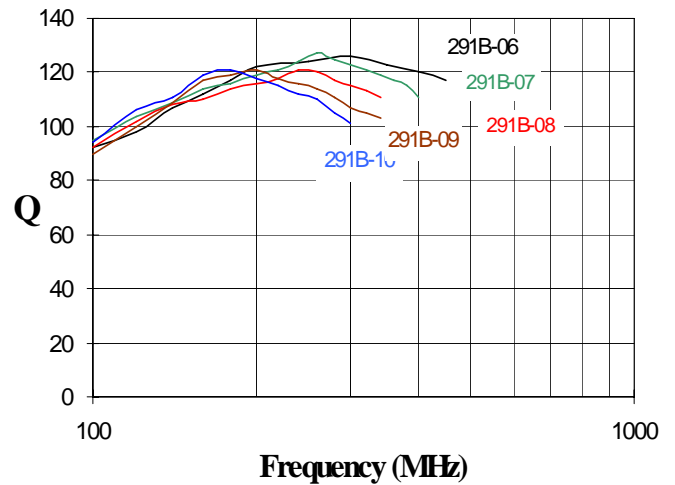


291B Series

#### 2. Typical Q vs. Frequency:



291A Series



291B Series