



Power Inductors - RFB Series



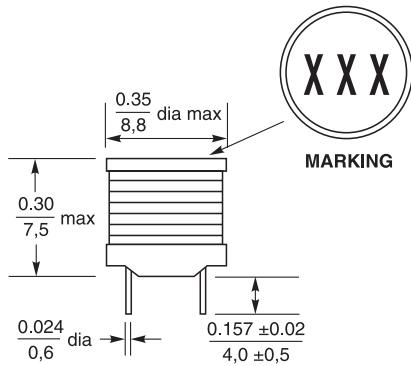
These low cost power inductors offer a wide range of inductance values, from 2.2 μH to 18 mH.

They have an open magnetic construction that gives them high current carrying capabilities. The RFB0807 Series offers the lowest profile (7.5 mm) and a standard 5 mm pin spacing. The larger RFB0810 and RFB1010 Series have lower DC resistance and higher current ratings. They also have a PVC wrap to protect the winding.

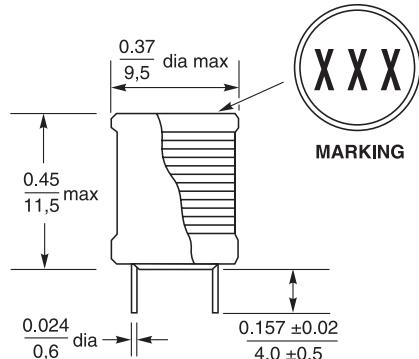
All RFB inductors feature 500 V isolation from winding to core.

Free evaluation samples are available by contacting Coilcraft or visiting www.coilcraft.com.

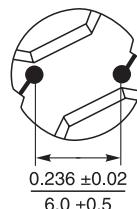
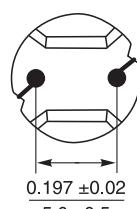
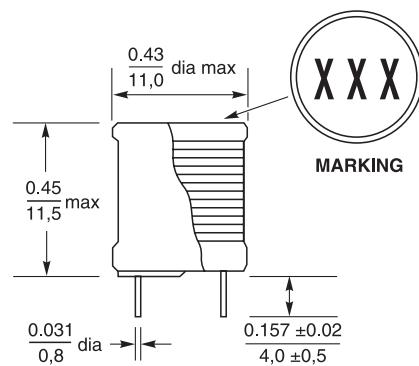
RFB0807



RFB0810



RFB1010



Terminations: Tin-silver over tin over copper over steel

Packaging: 150 parts per tray

Coilcraft®

Specifications subject to change without notice. Document 277-1 Revised 01/15/04

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469
E-mail info@coilcraft.com Web <http://www.coilcraft.com>



Power Inductors - RFB0807 Series

Part number	Inductance ¹	DCR max (Ohms)	SRF typ ² (MHz)	Isat ³ (A)	Irms (A) ⁴	
					20°C rise	40°C rise
RFB0807-2R2L	2.2 µH ±20%	0.012	80	6.00	5.00	7.50
RFB0807-2R7L	2.7 µH ±20%	0.014	40	5.50	4.60	6.54
RFB0807-3R3L	3.3 µH ±20%	0.017	40	5.00	4.20	5.97
RFB0807-3R9L	3.9 µH ±20%	0.020	40	4.50	3.70	5.26
RFB0807-4R7L	4.7 µH ±20%	0.024	40	4.20	3.50	4.98
RFB0807-5R6L	5.6 µH ±20%	0.028	40	4.00	3.40	4.83
RFB0807-6R8L	6.8 µH ±20%	0.033	30	3.60	3.20	4.55
RFB0807-8R2L	8.2 µH ±20%	0.035	30	3.30	3.00	4.27
RFB0807-100L	10 µH ±10%	0.040	30	3.10	3.00	4.20
RFB0807-120L	12 µH ±10%	0.050	30	2.80	2.50	3.56
RFB0807-150L	15 µH ±10%	0.065	25	2.50	2.25	3.20
RFB0807-180L	18 µH ±10%	0.078	20	2.30	2.07	2.94
RFB0807-220L	22 µH ±10%	0.100	20	2.10	1.90	2.70
RFB0807-270L	27 µH ±10%	0.110	17	1.90	1.70	2.42
RFB0807-330L	33 µH ±10%	0.120	15	1.70	1.50	2.13
RFB0807-390L	39 µH ±10%	0.160	13	1.60	1.45	2.06
RFB0807-470L	47 µH ±10%	0.190	12	1.45	1.30	1.85
RFB0807-560L	56 µH ±10%	0.210	11	1.30	1.20	1.71
RFB0807-680L	68 µH ±10%	0.280	10	1.20	1.10	1.56
RFB0807-820L	82 µH ±10%	0.330	9	1.10	1.00	1.42
RFB0807-101L	100 µH ±10%	0.400	8	1.00	0.90	1.30
RFB0807-121L	120 µH ±10%	0.450	7	0.90	0.80	1.14
RFB0807-151L	150 µH ±10%	0.510	6	0.80	0.72	1.02
RFB0807-181L	180 µH ±10%	0.700	5	0.70	0.63	0.90
RFB0807-221L	220 µH ±10%	0.800	5	0.65	0.60	0.85
RFB0807-271L	270 µH ±10%	0.900	4.5	0.60	0.55	0.78
RFB0807-331L	330 µH ±10%	1.16	4.5	0.55	0.50	0.71
RFB0807-391L	390 µH ±10%	1.31	3.5	0.45	0.40	0.57
RFB0807-471L	470 µH ±10%	1.75	2.9	0.40	0.36	0.51
RFB0807-561L	560 µH ±10%	1.95	2.7	0.38	0.35	0.50
RFB0807-681L	680 µH ±10%	2.20	2.6	0.35	0.31	0.44
RFB0807-821L	820 µH ±10%	3.00	2.6	0.32	0.29	0.41
RFB0807-102L	1.0mH ±10%	3.40	2.6	0.30	0.25	0.40
RFB0807-122L	1.2mH ±10%	4.50	2.3	0.28	0.24	0.34
RFB0807-152L	1.5mH ±10%	5.20	2.1	0.25	0.21	0.30
RFB0807-182L	1.8mH ±10%	5.80	1.8	0.22	0.20	0.28
RFB0807-222L	2.2mH ±10%	8.00	1.5	0.20	0.18	0.26
RFB0807-272L	2.7mH ±10%	8.90	1.2	0.18	0.17	0.24
RFB0807-332L	3.3mH ±10%	11.8	1.1	0.15	0.14	0.19
RFB0807-392L	3.9mH ±10%	13.1	1.0	0.12	0.11	0.16
RFB0807-472L	4.7mH ±10%	17.6	1.0	0.10	0.10	0.15
RFB0807-562L	5.6mH ±10%	19.6	0.9	0.10	0.10	0.15
RFB0807-682L	6.8mH ±10%	27	0.8	0.10	0.10	0.14
RFB0807-822L	8.2mH ±10%	30	0.7	0.10	0.10	0.14
RFB0807-103L	10mH ±10%	34	0.7	0.10	0.10	0.13
RFB0807-123L	12mH ±10%	46	0.6	0.08	0.10	0.13
RFB0807-153L	15mH ±10%	53	0.5	0.06	0.08	0.11
RFB0807-183L	18mH ±10%	56	0.5	0.05	0.08	0.10

1. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.

2. SRF measured using Agilent/HP 4191A or equivalent.

3. DC current at which the inductance drops 10% (typ) from its value without current.

4. Average current for temperature rise above 25°C ambient.

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

6. Electrical specifications at 25°C.

Coilcraft®

Specifications subject to change without notice. Document 277-2 Revised 2/28/02

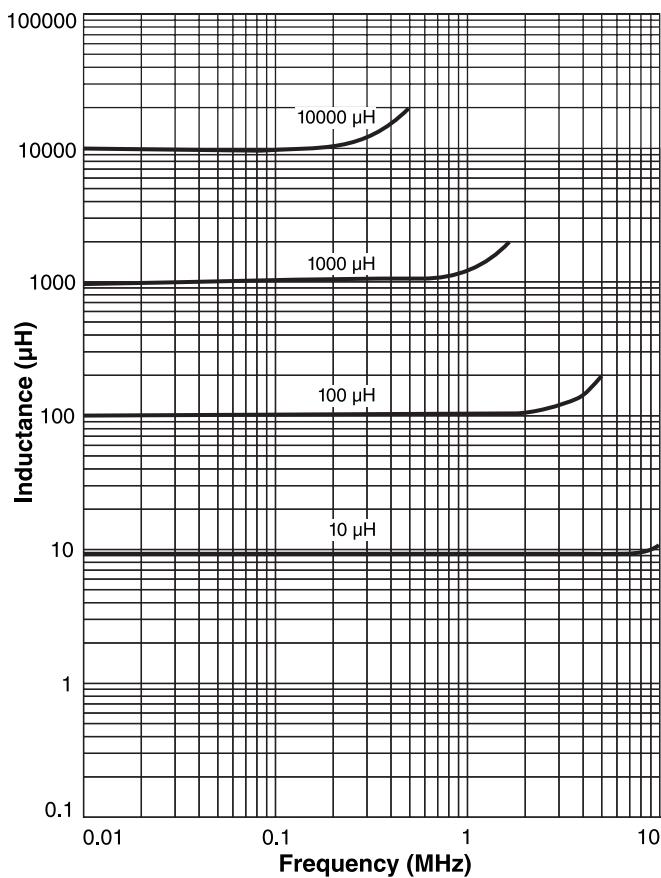
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web http://www.coilcraft.com

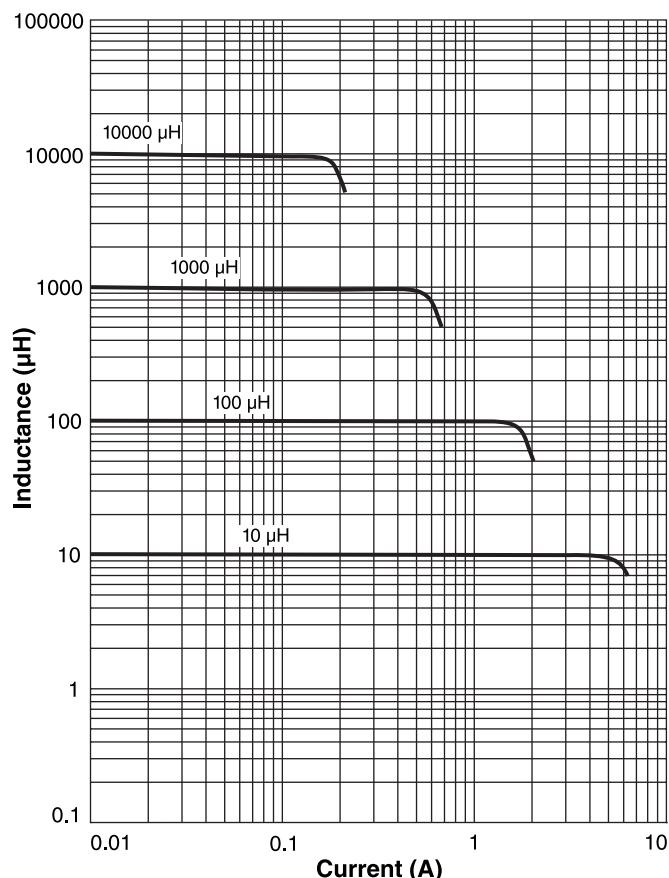


Power Inductors-RFB0807 Series

Typical L vs Frequency



Typical L vs Current



Coilcraft®

Specifications subject to change without notice. Document 277-3 Revised 2/28/02



Power Inductors - RFB0810 Series

Part number	Inductance ¹ ±10%	DCR max (Ohms)	SRF typ ² (MHz)	Isat ³ (A)	Irms (A) ⁴	
					20°C rise	40°C rise
RFB0810-100L	10 µH	0.030	22	4.20	4.00	5.30
RFB0810-120L	12 µH	0.035	20	3.90	3.75	5.10
RFB0810-150L	15 µH	0.040	17	3.60	3.52	4.80
RFB0810-180L	18 µH	0.040	15	3.30	3.30	4.50
RFB0810-220L	22 µH	0.050	12	2.90	3.20	4.20
RFB0810-270L	27 µH	0.055	12	2.60	2.87	3.90
RFB0810-330L	33 µH	0.075	11	2.40	2.65	3.60
RFB0810-390L	39 µH	0.085	10.3	2.20	2.44	3.30
RFB0810-470L	47 µH	0.100	9.5	2.00	2.22	3.00
RFB0810-560L	56 µH	0.120	8.6	1.80	2.00	2.70
RFB0810-680L	68 µH	0.150	7.5	1.60	1.77	2.40
RFB0810-820L	82 µH	0.190	6.6	1.50	1.54	2.10
RFB0810-101L	100 µH	0.200	5.5	1.40	1.30	1.80
RFB0810-121L	120 µH	0.240	5.3	1.20	1.22	1.70
RFB0810-151L	150 µH	0.340	4.5	1.10	1.14	1.60
RFB0810-181L	180 µH	0.360	4.4	1.00	1.06	1.50
RFB0810-221L	220 µH	0.480	4.4	0.92	0.98	1.40
RFB0810-271L	270 µH	0.550	4.0	0.84	0.90	1.30
RFB0810-331L	330 µH	0.650	3.5	0.75	0.82	1.10
RFB0810-391L	390 µH	0.850	3.0	0.70	0.85	1.00
RFB0810-471L	470 µH	1.00	2.5	0.63	0.67	0.90
RFB0810-561L	560 µH	1.10	2.3	0.58	0.59	0.80
RFB0810-681L	680 µH	1.40	2.0	0.52	0.51	0.70
RFB0810-821L	820 µH	1.90	2.0	0.48	0.43	0.60
RFB0810-102L	1.0 mH	2.20	2.0	0.43	0.35	0.50
RFB0810-122L	1.2 mH	2.80	1.6	0.40	0.33	0.47
RFB0810-152L	1.5 mH	3.20	1.3	0.35	0.31	0.45
RFB0810-182L	1.8 mH	3.60	1.3	0.32	0.29	0.42
RFB0810-222L	2.2 mH	4.80	1.3	0.29	0.27	0.39
RFB0810-272L	2.7 mH	5.60	1.2	0.26	0.25	0.36
RFB0810-332L	3.3 mH	7.60	1.0	0.24	0.23	0.33
RFB0810-392L	3.9 mH	8.90	0.9	0.22	0.21	0.31
RFB0810-472L	4.7 mH	9.60	0.9	0.20	0.20	0.28
RFB0810-562L	5.6 mH	12.0	0.8	0.18	0.18	0.25
RFB0810-682L	6.8 mH	14.0	0.7	0.16	0.16	0.23
RFB0810-822L	8.2 mH	17.5	0.6	0.15	0.14	0.20
RFB0810-103L	10 mH	21	0.6	0.13	0.12	0.17
RFB0810-123L	12 mH	28	0.5	0.12	0.11	0.15
RFB0810-153L	15 mH	32	0.5	0.11	0.10	0.14
RFB0810-183L	18 mH	36	0.4	0.10	0.09	0.12

1. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.

2. SRF measured using Agilent/HP 4191A or equivalent.

3. DC current at which the inductance drops 10% (typ) from its value without current.

4. Average current for temperature rise above 25°C ambient.

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

6. Electrical specifications at 25°C.

Coilcraft®

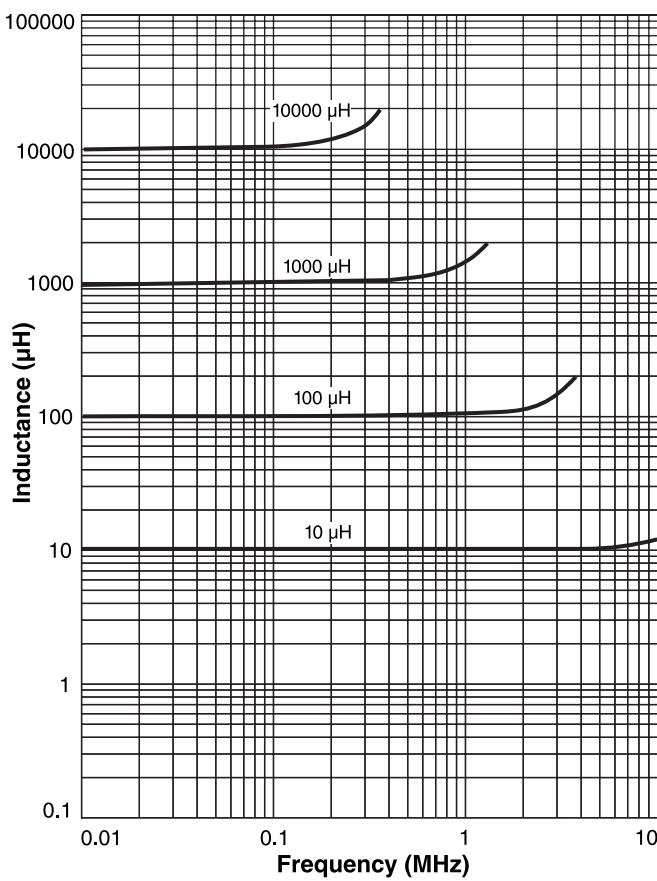
Specifications subject to change without notice. Document 277-4 Revised 2/28/02

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469
E-mail info@coilcraft.com Web http://www.coilcraft.com

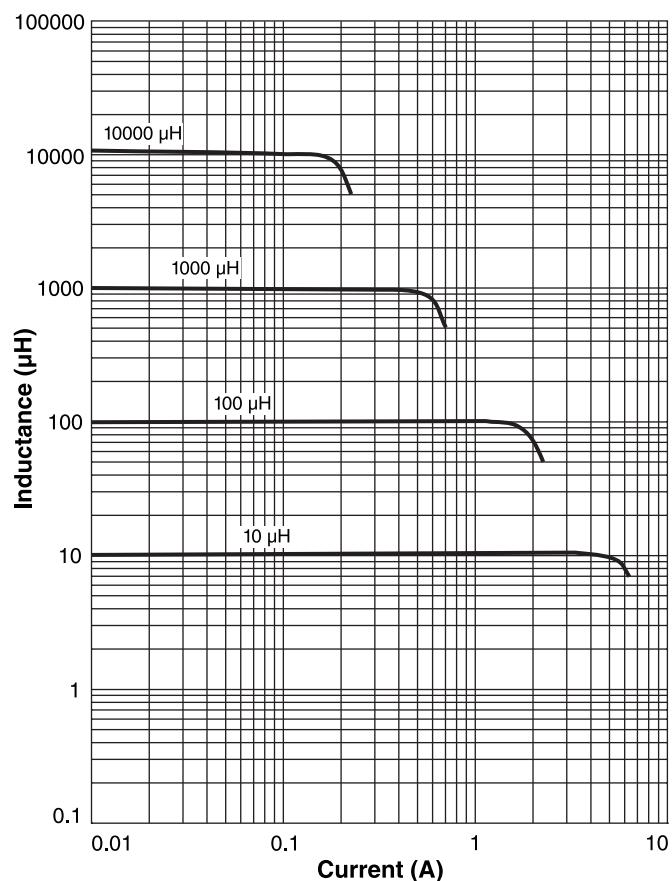


Power Inductors-RFB0810 Series

Typical L vs Frequency



Typical L vs Current



Coilcraft®

Specifications subject to change without notice. Document 277-5 Revised 2/28/02



Power Inductors - RFB1010 Series

Part number	Inductance ¹ ±10%	DCR max (Ohms)	SRF typ ² (MHz)	Isat ³ (A)	Irms (A) ⁴	
					20°C rise	40°C rise
RFB1010-100L	10 µH	0.023	23	6.10	4.20	6.00
RFB1010-120L	12 µH	0.025	20	5.60	4.00	5.70
RFB1010-150L	15 µH	0.028	19	5.00	3.75	5.40
RFB1010-180L	18 µH	0.030	16	4.60	3.50	5.00
RFB1010-220L	22 µH	0.042	15	4.10	3.30	4.70
RFB1010-270L	27 µH	0.046	12	3.70	3.00	4.40
RFB1010-330L	33 µH	0.055	11	3.40	2.80	4.10
RFB1010-390L	39 µH	0.075	10.3	3.10	2.60	3.80
RFB1010-470L	47 µH	0.082	9.5	2.80	2.40	3.50
RFB1010-560L	56 µH	0.090	8.6	2.60	2.20	3.20
RFB1010-680L	68 µH	0.120	7.5	2.30	2.00	2.80
RFB1010-820L	82 µH	0.140	7.0	2.10	1.90	2.50
RFB1010-101L	100 µH	0.150	7.0	1.90	1.70	2.20
RFB1010-121L	120 µH	0.210	6.0	1.75	1.60	2.10
RFB1010-151L	150 µH	0.245	5.0	1.60	1.50	1.90
RFB1010-181L	180 µH	0.30	5.0	1.45	1.40	1.80
RFB1010-221L	220 µH	0.36	4.3	1.30	1.30	1.70
RFB1010-271L	270 µH	0.49	4.0	1.20	1.20	1.60
RFB1010-331L	330 µH	0.57	3.5	1.10	1.00	1.40
RFB1010-391L	390 µH	0.62	3.0	1.00	0.90	1.30
RFB1010-471L	470 µH	0.81	3.0	0.90	0.80	1.20
RFB1010-561L	560 µH	0.92	2.3	0.80	0.70	1.05
RFB1010-681L	680 µH	1.20	2.0	0.75	0.60	0.93
RFB1010-821L	820 µH	1.35	2.0	0.68	0.55	0.80
RFB1010-102L	1.0 mH	1.45	2.0	0.60	0.50	0.67
RFB1010-122L	1.2 mH	2.10	1.6	0.55	0.47	0.63
RFB1010-152L	1.5 mH	2.40	1.4	0.50	0.44	0.59
RFB1010-182L	1.8 mH	3.50	1.3	0.45	0.41	0.55
RFB1010-222L	2.2 mH	4.10	1.3	0.41	0.38	0.50
RFB1010-272L	2.7 mH	5.20	1.2	0.37	0.35	0.47
RFB1010-332L	3.3 mH	6.00	1.0	0.34	0.32	0.43
RFB1010-392L	3.9 mH	7.00	0.9	0.31	0.29	0.39
RFB1010-472L	4.7 mH	8.50	0.8	0.28	0.25	0.35
RFB1010-562L	5.6 mH	10.0	0.8	0.26	0.23	0.30
RFB1010-682L	6.8 mH	13.0	0.7	0.23	0.19	0.26
RFB1010-822L	8.2 mH	15.8	0.6	0.21	0.16	0.22
RFB1010-103L	10 mH	19	0.6	0.19	0.13	0.18
RFB1010-123L	12 mH	22	0.5	0.17	0.12	0.17
RFB1010-153L	15 mH	29	0.5	0.16	0.11	0.15
RFB1010-183L	18 mH	33	0.4	0.14	0.10	0.13

1. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.

2. SRF measured using Agilent/HP 4191A or equivalent.

3. DC current at which the inductance drops 10% (typ) from its value without current.

4. Average current for temperature rise above 25°C ambient.

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

6. Electrical specifications at 25°C.

Coilcraft®

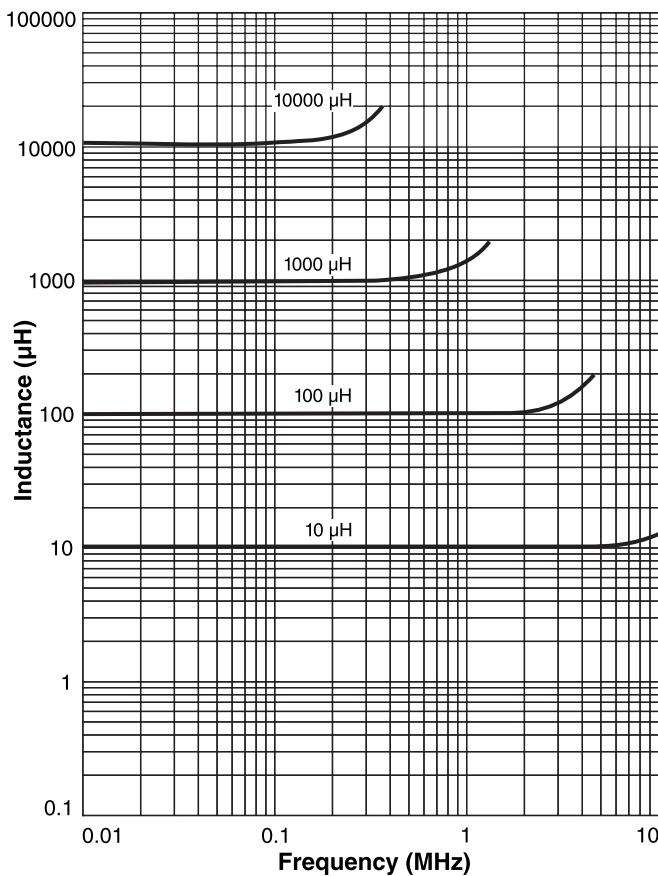
Specifications subject to change without notice. Document 277-6 Revised 2/28/02

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469
E-mail info@coilcraft.com Web http://www.coilcraft.com

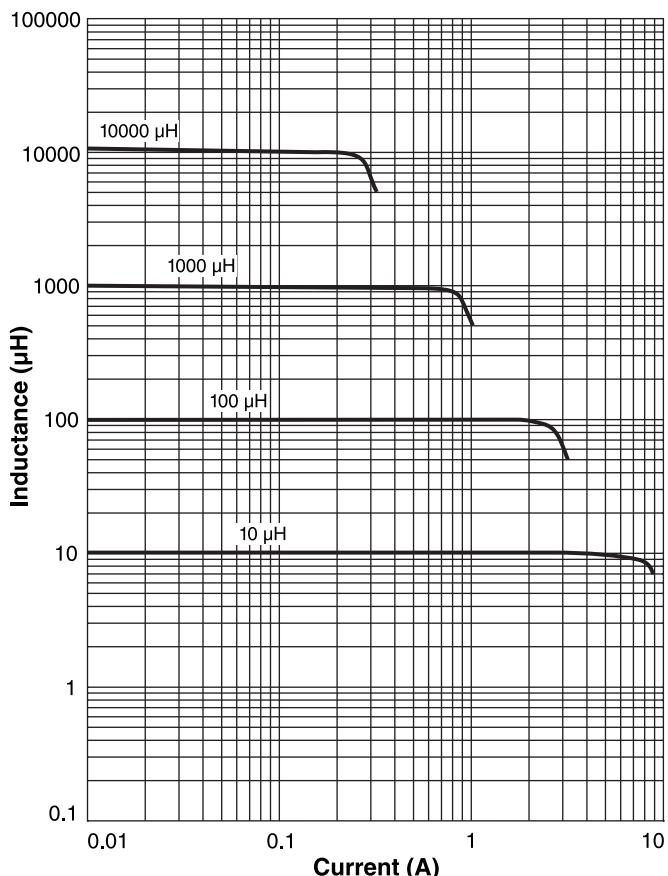


Power Inductors-RFB1010 Series

Typical L vs Frequency



Typical L vs Current



Coilcraft®

Specifications subject to change without notice. Document 277-7 Revised 2/28/02

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469
E-mail info@coilcraft.com Web http://www.coilcraft.com