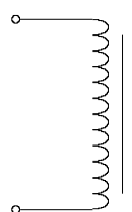
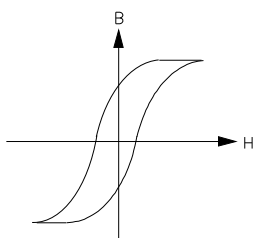


Magnetic Components

INDUCTORS, COILS & SMPS MAGNETICS



PRODUCTS INCLUDE...

CURRENT SENSE
POWER LINE CHOKES
HASH CHOKES
COMMON MODE
MAG AMP TOROIDS
POWER INDUCTORS
SWING INDUCTORS
HIGH L

AIR COILS
RF/HIGH Q
RADIAL LEAD
SURFACE MOUNT
LOW POWER
COILFORMS
EMI SUPPRESSION
BUCK INDUCTORS



www.rhombus-ind.com



Rhombus Industries Incorporated is a privately owned corporation and a leading designer and manufacturer of transformers and magnetic products. Our headquarters is located in Santa Ana, California and includes engineering, research and development, prototype manufacturing capabilities, sales and extensive in-house testing capabilities. All product is manufactured at our privately owned and operated sub-assembly operation located in Thailand.

Since our founding in 1970, insuring the accuracy, consistency, and overall quality of Rhombus products is of primary concern. All of our products are designed and built to meet the most demanding reliability requirements. We have an extensive quality control program which incorporates statistical process control and is also in strict compliance with MIL-I-45208.

For over 45 years, Rhombus has gained unique experience in providing quality components and innovative designs for users of magnetic products. Rhombus welcomes custom designs tailored to unique customer requirements. Our dedicated employees look forward to proving to you that Rhombus offers the price, delivery and application support advantages that can address your most critical needs.

For Downloadable Catalogs and Data Sheets, as well as Complete On-line Magnetic Product resources please visit us on the web at

www.rhombus-ind.com

Cross Reference

Application Notes

Part Index

with links to data sheets

I.C. Guide

Inductor Selction Guide

CM Choke Guide

Sales Representatives

Catalogs

Transformers (Datacomm) Catalog

Mag. Componentents (Power/SMPS) Catalog

Audio Magnetics Catalog

Delay Line Catalog

Magnetic Components

Inductors Coils, SMPS Magnetics

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CURRENT SENSE INDUCTORS

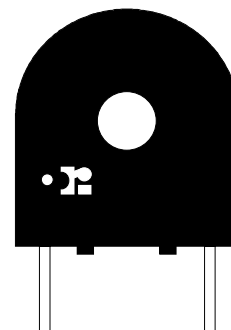
DESIGNED FOR SWITCHING POWER SUPPLY APPLICATIONS

HOLE THRU CENTER FOR PRIMARY WINDING

FREQUENCY RANGE 20KHZ OR GREATER

1 TURN PRIMARY PEAK SENSE CURRENT 20 AMPS

2500V RMS HIPOT

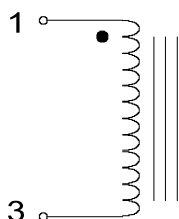


Electrical Specifications at 25°C

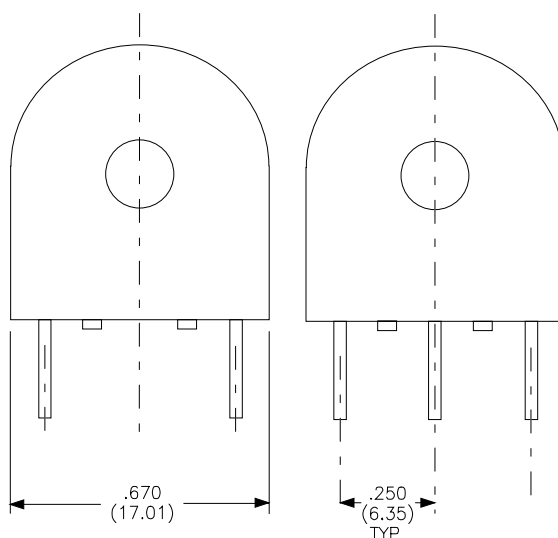
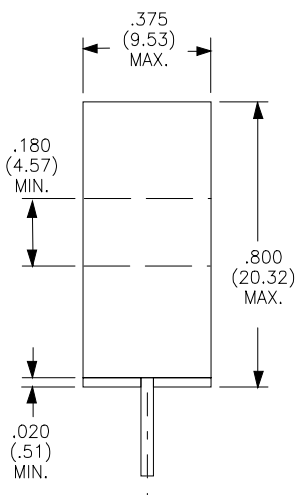
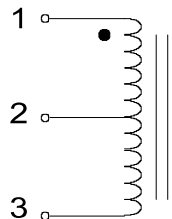
Part Number	Schematic Style	Secondary Turns	Secondary Induct. min. (mH)	DCR max. (Ω)	Terminating Resistance (Ω)	Pri. Unipolar Amp-microsec. Max. Rating	Pri. Bipolar Amp-microsec. Max. Rating
L-11001	A	50	5.0	0.70	50	150	300
L-11002	A	100	20.0	1.40	100	300	600
L-11003	A	200	80.0	4.70	200	600	1200
L-11004	A	300	180.0	11.00	300	900	1800
L-11011	B	50CT	5.0	0.70	50	150	300
L-11012	B	100CT	20.0	1.40	100	300	600
L-11013	B	200CT	80.0	4.50	200	600	1200
L-11014	B	300CT	180.0	11.00	300	900	1800

*RoHS Compliant
Available
Add "R" Suffix*

STYLE "A"
SCHEMATIC



STYLE "B"
SCHEMATIC



Physical Dimensions
inches (mm)

- 1) Leads are 20 AWG
- 2) Lead length is .170 Min.

CURRENT SENSE TRANSFORMERS

DESIGNED FOR SWITCHING
POWER SUPPLY APPLICATIONS

PRIMARY WINDING FURNISHED

PRIMARY PEAK SENSE CURRENT
20 AMPS OR GREATER

3750V RMS HI-POT

Electrical Specifications at 25°C

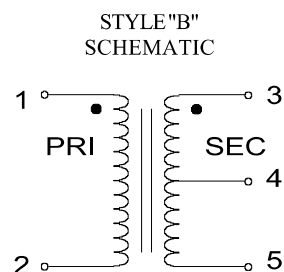
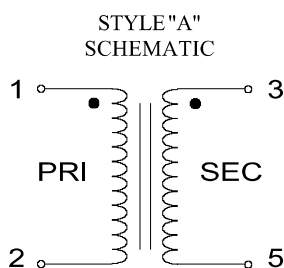
Part Number	Schematic Style	Secondary Turns	Secondary Induct. min. (mH)	DCR max. (Ω)	Terminating Resistance (Ω)	Pri. Unipolar Amp-microsec. Max. Rating	Pri. Bipolar Amp-microsec. Max. Rating
T-20100	A	50	5.0	0.70	50	150	300
T-20101	A	100	20.0	1.40	100	300	600
T-20102	A	200	80.0	4.70	200	600	1200
T-20103	A	300	180.0	11.00	300	900	1800
T-20104	B	50CT	5.0	0.70	50	150	300
T-20105	B	100CT	20.0	1.40	100	300	600
T-20106	B	200CT	80.0	4.50	200	600	1200
T-20107	B	300CT	180.0	11.00	300	900	1800

Maximum ratings specified with rated secondary terminating resistance and 1 turn.

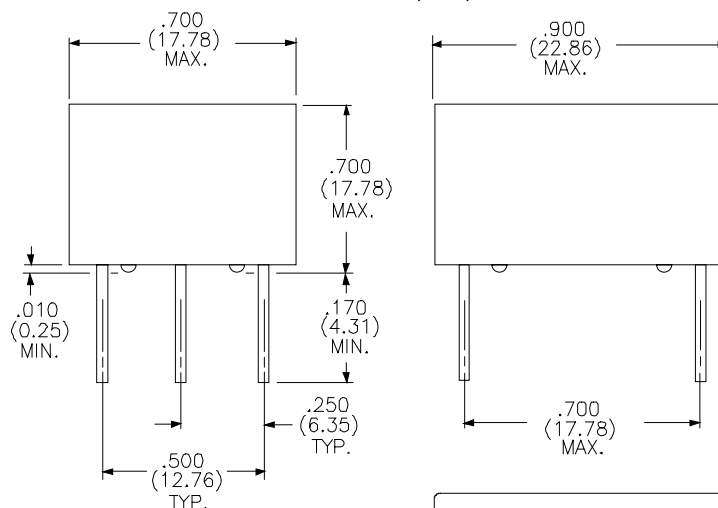
Amp- μ sec rating of primary equals volt- μ sec rating of secondary when secondary is terminated into rated resistance.

Maximum operating temperature 105° C.

For further details refer to data sheets

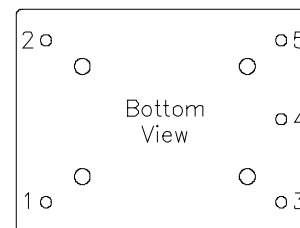


Physical Dimensions inches (mm)



PRIMARY Leads: 16AWG

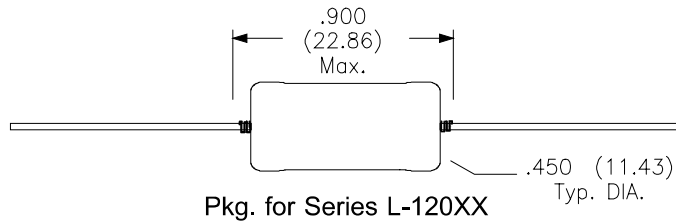
SECONDARY Leads: 20AWG



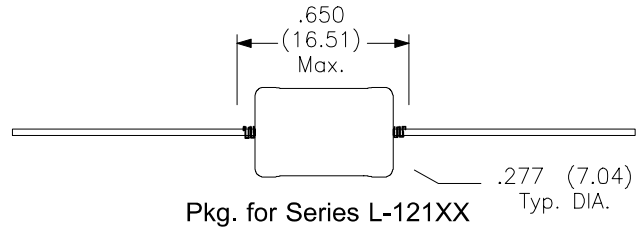
*RoHS Compliant
Available
Add "R" Suffix*

Power Line Chokes (Beads)

Applications: Power Amplifiers • Filters
Power Supplies • SCR and Triac Controls
Speaker Crossover Networks • RFI Suppression



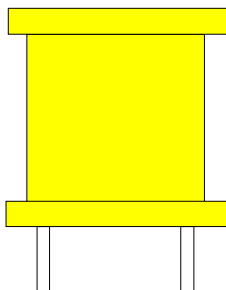
Axial Leads - #20 AWG Tinned Copper
Coils finished with Polyolefin Shrink Tube
Test Frequency 1 kHz
Saturation current lowers inductance by 5% typ.



Part Number	L μH	DCR Ω Max.	I - Sat. Amps	I - Rat. Amps
L-12000	3.9	0.007	15.5	4.0
L-12001	4.7	0.008	13.9	4.0
L-12002	5.6	0.009	12.6	4.0
L-12003	6.8	0.011	11.5	4.0
L-12004	8.2	0.013	9.89	4.0
L-12005	10	0.017	8.70	4.0
L-12006	12	0.019	8.21	4.0
L-12007	15	0.022	7.34	4.0
L-12008	18	0.023	6.64	4.0
L-12009	22	0.026	6.07	4.0
L-12010	27	0.027	5.36	4.0
L-12011	33	0.032	4.82	4.0
L-12012	39	0.033	4.36	4.0
L-12013	47	0.035	3.98	4.0
L-12014	56	0.037	3.66	3.2
L-12015	68	0.047	3.31	2.5
L-12016	82	0.060	3.10	2.0
L-12017	100	0.080	2.79	1.6
L-12018	120	0.090	2.54	1.6
L-12019	150	0.107	2.22	1.6
L-12020	180	0.123	1.98	1.6
L-12021	220	0.150	1.89	1.6
L-12022	270	0.162	1.63	1.6
L-12023	330	0.183	1.51	1.6
L-12024	390	0.212	1.39	1.6
L-12025	470	0.281	1.24	1.2
L-12026	560	0.380	1.17	1.0
L-12027	680	0.420	1.05	1.0
L-12028	820	0.548	0.97	0.8
L-12029	1000	0.655	0.87	0.8
L-12030	1200	0.884	0.79	0.6
L-12031	1500	1.040	0.70	0.6
L-12032	1800	1.180	0.64	0.6
L-12033	2200	1.560	0.58	0.5
L-12034	2700	2.060	0.53	0.4
L-12035	3300	2.530	0.47	0.4
L-12036	3900	2.750	0.43	0.4
L-12037	4700	3.190	0.39	0.4
L-12038	5600	3.920	0.359	0.315
L-12039	6800	5.690	0.322	0.25
L-12040	8200	6.320	0.293	0.25
L-12041	10000	7.300	0.266	0.25
L-12042	12000	9.210	0.241	0.20
L-12043	15000	10.5	0.214	0.2
L-12044	18000	14.8	0.198	0.158

Part Number	L μH	DCR Ω Max.	I - Sat. Amps	I - Rat. Amps
L-12100	3.9	0.019	7.300	1.28
L-12101	4.7	0.022	6.300	1.28
L-12102	5.6	0.024	5.600	1.28
L-12103	6.8	0.026	5.300	1.28
L-12104	8.2	0.028	4.500	1.28
L-12105	10	0.033	4.100	1.28
L-12106	12	0.037	3.600	1.28
L-12107	15	0.040	3.300	1.28
L-12108	18	0.044	3.000	1.28
L-12109	22	0.050	2.700	1.28
L-12110	27	0.058	2.500	1.28
L-12111	33	0.075	2.200	1.008
L-12112	39	0.094	2.000	0.804
L-12113	47	0.109	1.800	0.804
L-12114	56	0.140	1.700	0.804
L-12115	68	0.145	1.500	0.804
L-12116	82	0.152	1.400	0.804
L-12117	100	0.208	1.200	0.632
L-12118	120	0.283	1.100	0.508
L-12119	150	0.340	1.000	0.508
L-12120	180	0.362	0.950	0.508
L-12121	220	0.430	0.860	0.508
L-12122	270	0.557	0.770	0.400
L-12123	330	0.665	0.700	0.400
L-12124	390	0.712	0.640	0.400
L-12125	470	1.150	0.590	0.315
L-12126	560	1.270	0.540	0.315
L-12127	680	1.610	0.490	0.250
L-12128	820	1.960	0.440	0.200
L-12129	1000	2.300	0.400	0.200
L-12130	1200	2.650	0.350	0.200
L-12131	1500	3.450	0.330	0.158
L-12132	1800	4.030	0.290	0.158
L-12133	2200	4.480	0.270	0.158
L-12134	2700	5.400	0.240	0.125
L-12135	3300	6.560	0.220	0.125
L-12136	3900	8.630	0.200	0.100
L-12137	4700	9.660	0.180	0.100
L-12138	5600	13.900	0.166	0.082
L-12139	6800	16.300	0.151	0.082
L-12140	8200	20.800	0.138	0.065
L-12141	10000	26.400	0.125	0.050
L-12142	12000	29.900	0.114	0.050
L-12143	15000	42.500	0.098	0.039
L-12144	18000	48.300	0.091	0.039

Power Line Chokes Drum Core Style



Applications

Power Amplifiers
Filters • Power Supplies
SCR and Triac Controls
Speaker Crossover Networks
RFI Suppression

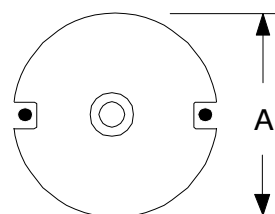
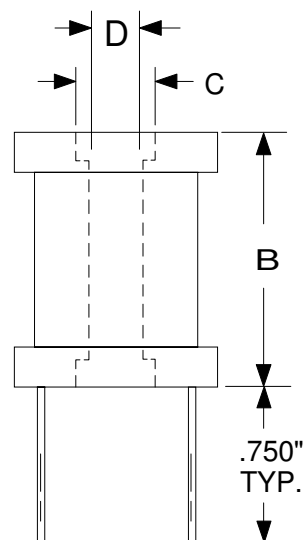
Part Number	L ± 20% (μ H)	DCR Nom. ($m\Omega$)	I Max. (A)	Lead Size AWG	Pkg. Code
L-12200	2.0	5	16.4	14	1
L-12202	4.0	10	10.3	16	1
L-12203	8.0	12	8.2	17	1
L-12204	18	13	8.2	17	1
L-12205	22	16	6.5	18	1
L-12206	30	21	5.2	19	1
L-12207	40	32	4.0	20	1
L-12401	15	8	13.0	15	2
L-12402	20	11	10.3	16	2
L-12403	30	17	8.2	17	2
L-12406	38	25	6.5	18	2
L-12407	50	28	6.0	18	2
L-12408	70	38	5.2	19	2
L-12411	100	59	4.1	20	2
L-12220	5.0	8	16.0	15	3
L-12221	20	13	12.9	16	3
L-12222	30	19	8.5	17	3
L-12223	50	25	6.8	18	3
L-12224	80	42	5.4	19	3
L-12225	120	53	5.0	19	3
L-12226	180	72	4.3	20	3
L-12227	200	105	4.1	20	3

Pre-Tinned Leads

Center hole for mechanical mounting

Coils finished with Polyolefin Shrink Tube

Test Frequency 1 kHz

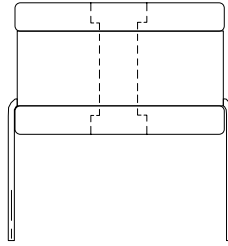


Flammability: Materials used in the production of these units are UL94-VO and meet requirements of IEC 695-2-2 needle flame test.

*Lead Free RoHS
Compliant Available
Add "LF" Suffix*

Pkg. Code	(Dimensions in inches)			
	A	B	C	D
1	0.560	0.810	0.187	0.126
2	0.709	0.795	0.187	0.126
3	0.709	0.866	0.187	0.126

Power Line Chokes Drum Core Style



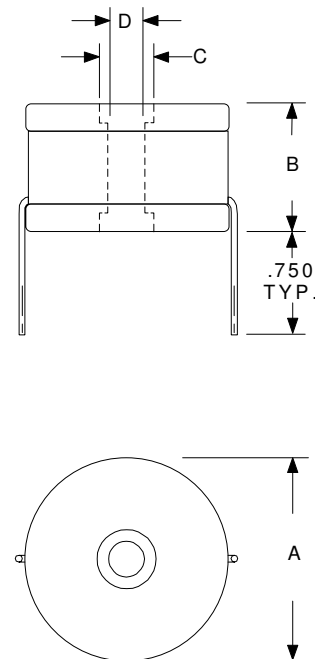
Applications

Power Amplifiers
Filters • Power Supplies
SCR and Triac Controls
Speaker Crossover Networks
RFI Suppression

Pre-Tinned Leads

Center hole for mechanical mounting
Coils finished with Polyolefin Shrink Tube
Test Frequency 1 kHz

Part Number	L ± 20% (μ H)	DCR Nom. ($m\Omega$)	I Max. (A)	Lead Size AWG	Pkg. Code
L-12420	5.0	4	16.4	14	4
L-12421	10	5	13.0	15	4
L-12423	15	9	10.3	16	4
L-12425	25	16	8.2	17	4
L-12428	50	33	5.2	19	4
L-12430	70	48	4.1	20	4
L-12431	100	58	4.1	20	4
L-12433	150	92	3.2	21	4
L-12440	10	5	21.6	14	5
L-12441	15	8	17.1	15	5
L-12442	25	15	13.2	16	5
L-12443	50	19	12.8	16	5
L-12445	75	29	10.8	17	5
L-12446	100	40	8.5	18	5
L-12447	180	46	8.0	18	5
L-12450	280	75	6.8	19	5
L-12452	450	131	5.4	20	5

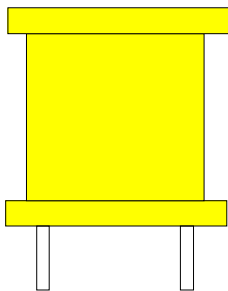


Flammability: Materials used in the production of these units are UL94-VO and meet requirements of IEC 695-2-2 needle flame test.

Pkg. Code	(Dimensions in inches)			
	A	B	C	D
4	0.866	0.570	0.267	0.147
5	0.866	0.728	0.267	0.147

*Lead Free RoHS
Compliant Available
Add "LF" Suffix*

Power Line Chokes Drum Core Style

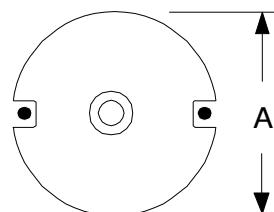
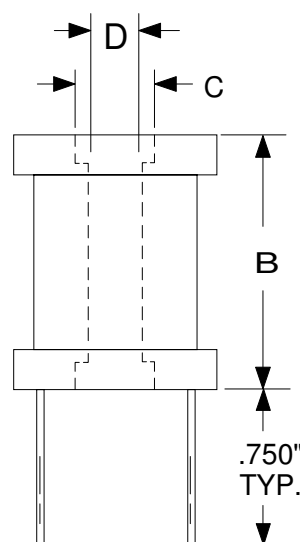


Applications

Power Amplifiers
Filters • Power Supplies
SCR and Triac Controls
Speaker Crossover Networks
RFI Suppression

Part Number	L ± 20% (μ H)	DCR Nom. ($m\Omega$)	I Max. (A)	Lead Size AWG	Pkg. Code
L-12470	18	5	24.0	14	6
L-12471	30	13	18.0	15	6
L-12472	50	25	15.0	16	6
L-12473	80	33	13.2	17	6
L-12474	120	36	13.0	17	6
L-12475	200	57	10.1	18	6
L-12478	300	85	8.0	19	6
L-12480	450	136	6.1	20	6
L-12481	680	170	6.0	20	6
L-12235	40	13	24.5	14	7
L-12236	60	19	18.0	15	7
L-12237	100	28	16.0	15	7
L-12239	150	38	13.5	16	7
L-12242	250	73	11.0	18	7
L-12243	380	86	8.5	18	7
L-12245	580	120	6.0	20	7
L-12247	880	200	5.4	20	7
L-12490	45	12	25.0	14	8
L-12492	70	18	18.8	15	8
L-12493	120	35	13.9	16	8
L-12495	185	50	12.0	17	8
L-12497	280	78	9.5	18	8
L-12500	450	130	7.5	19	8
L-12503	700	198	4.1	20	8

Pre-Tinned Leads
Center hole for mechanical mounting
Coils finished with
Polyolefin Shrink Tube
Test Frequency 1 kHz

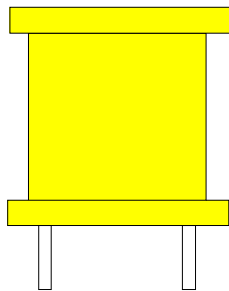


Flammability: Materials used in the production of these units are UL94-VO and meet requirements of IEC 695-2-2 needle flame test.

*Lead Free RoHS
Compliant Available
Add "LF" Suffix*

Pkg. Code	(Dimensions in inches)			
	A	B	C	D
6	0.949	0.795	0.187	0.126
7	0.955	0.975	0.187	0.126
8	1.100	0.805	0.237	0.175

Power Line Chokes Drum Core Style



Applications

Power Amplifiers
Filters • Power Supplies
SCR and Triac Controls
Speaker Crossover Networks
RFI Suppression

Part Number	L ± 20% (μ H)	DCR Nom. (m Ω)	I Max. (A)	Lead Size AWG	Pkg. Code
L-12530	80	17	19.3	14	9
L-12531	100	27	16.0	15	9
L-12534	180	40	12.5	16	9
L-12536	300	78	10.0	17	9
L-12538	450	100	8.0	18	9
L-12540	700	150	6.4	19	9
L-12543	1300	260	5.0	20	9
L-12545	2000	350	4.5	20	9
L-12254	100	22	12.0	14	10
L-12256	200	38	10.0	15	10
L-12257	300	56	8.5	16	10
L-12259	450	70	8.5	16	10
L-12262	700	130	5.5	18	10
L-12264	1000	166	5.5	18	10
L-12266	1500	250	4.3	20	10
L-12267	2000	340	3.4	20	10
L-12560	150	16	20.5	12	11
L-12561	400	43	11.9	14	11
L-12563	500	61	10.6	15	11
L-12564	1000	109	7.6	16	11
L-12566	1500	141	6.2	16	11
L-12567	2000	181	5.8	17	11
L-12569	3000	300	4.5	18	11
L-12571	4700	470	3.5	19	11
L-12573	7000	680	3.0	20	11

Flammability: Materials used in the production of these units are UL94-VO and meet requirements of IEC 695-2-2 needle flame test.

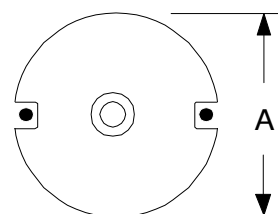
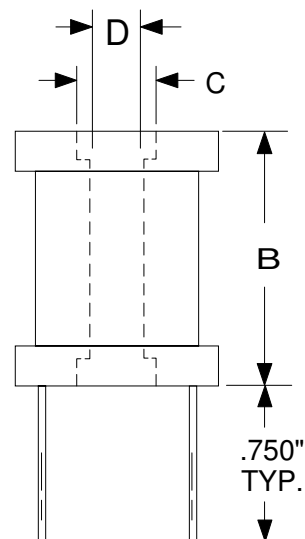
*Lead Free RoHS
Compliant Available
Add "LF" Suffix*

Pre-Tinned Leads

Center hole for mechanical mounting

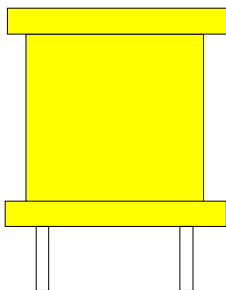
Coils finished with Polyolefin Shrink Tube

Test Frequency 1 kHz



Pkg. Code	(Dimensions in inches)			
	A	B	C	D
9	1.100	1.010	0.237	0.175
10	1.390	1.010	0.315	0.190
11	1.390	1.380	0.315	0.190

Power Line Chokes Drum Core Style



Applications

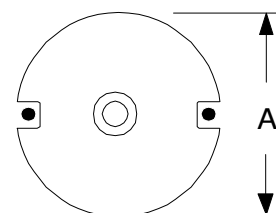
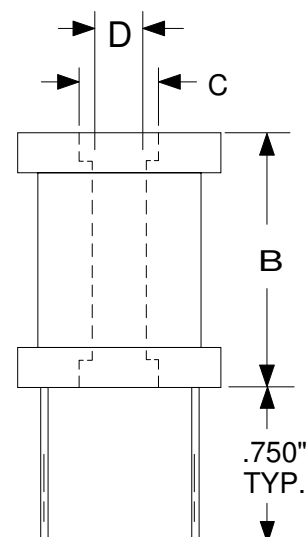
Power Amplifiers
Filters • Power Supplies
SCR and Triac Controls
Speaker Crossover Networks
RFI Suppression

Pre-Tinned Leads

Center hole for mechanical mounting
Coils finished with
Polyolefin Shrink Tube

Test Frequency 1 kHz

Part Number	L ± 20% (μ H)	DCR Nom. ($m\Omega$)	I Max. (A)	Lead Size AWG	Pkg. Code
L-12590	200	19	19.2	11	12
L-12591	300	25	17.8	12	12
L-12592	450	44	15.0	14	12
L-12593	700	59	11.7	14	12
L-12595	1000	97	9.4	15	12
L-12597	1700	148	7.6	16	12
L-12598	2000	170	6.8	16	12
L-12599	2600	220	6.0	17	12
L-12601	3800	340	5.0	18	12
L-12603	7900	650	3.4	19	12
L-12605	10000	920	3.0	20	12
L-12606	15000	960	2.9	20	12
L-12630	200	15	28.8	10	13
L-12632	380	30	21.4	12	13
L-12634	750	53	15.6	13	13
L-12636	1000	79	13.2	14	13
L-12637	1600	134	10.5	15	13
L-12639	2500	200	7.8	16	13
L-12641	4000	320	6.5	17	13
L-12643	6500	500	5.2	18	13
L-12645	12000	900	3.8	19	13
L-12648	18000	1400	3.6	20	13

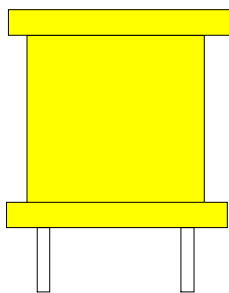


Flammability: Materials used in the production of these units are UL94-VO and meet requirements of IEC 695-2-2 needle flame test.

*Lead Free RoHS
Compliant Available
Add "LF" Suffix*

Pkg. Code	(Dimensions in inches)			
	A	B	C	D
12	1.770	1.380	0.360	0.270
13	2.200	1.380	0.380	0.290

Power Line Chokes Drum Core Style



Applications

Power Amplifiers
Filters • Power Supplies
SCR and Triac Controls
Speaker Crossover Networks
RFI Suppression

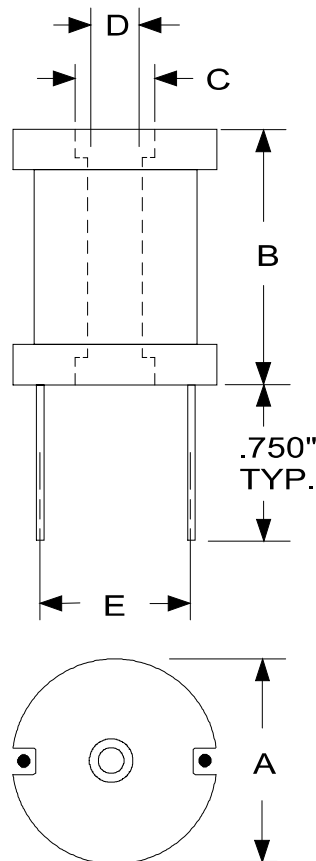
Part Number	L ± 20% (μ H)	DCR Nom. (m Ω)	I Max. (A)	Lead Size AWG	Pkg. Code
L-12200	2.0	5	12.0	14	1
L-12201	3.0	7	10.0	15	1
L-12202	4.0	10	8.5	16	1
L-12203	8.0	12	7.0	17	1
L-12204	18	13	7.0	17	1
L-12205	22	16	5.5	18	1
L-12206	30	21	4.3	19	1
L-12207	37	32	3.4	20	1
L-12219	4.0	6	12.0	14	2
L-12220	5.0	8	10.0	15	2
L-12221	20	13	8.5	16	2
L-12222	30	19	7.0	17	2
L-12223	40	25	5.5	18	2
L-12224	75	42	4.3	19	2
L-12225	120	53	4.3	19	2
L-12226	150	72	3.4	20	2
L-12227	200	105	2.6	20	2
L-12235	40	13	12.0	14	3
L-12236	60	19	10.0	15	3
L-12237	80	22	10.0	15	3
L-12238	120	32	8.5	16	3
L-12239	150	38	8.5	16	3
L-12240	175	46	7.0	17	3
L-12241	200	49	7.0	17	3
L-12242	300	73	5.5	18	3
L-12243	400	86	5.5	18	3
L-12244	475	110	4.3	19	3
L-12245	550	120	4.3	20	3
L-12246	700	165	3.4	20	3
L-12247	825	183	3.4	20	3
L-12254	100	22	12.0	14	4
L-12255	150	34	10.0	15	4
L-12256	200	38	10.0	15	4
L-12257	300	56	8.5	16	4
L-12258	375	65	8.5	16	4
L-12259	450	70	8.5	16	4
L-12260	500	89	7.0	17	4
L-12261	600	98	7.0	17	4
L-12262	700	130	5.5	18	4
L-12263	850	145	5.5	18	4
L-12264	1000	166	5.5	18	4
L-12265	1300	218	4.3	19	4
L-12266	1600	250	4.3	20	4
L-12267	2000	340	3.4	20	4

Pre-Tinned Leads

Center hole for mechanical mounting

Coils finished with Polyolefin Shrink Tube

Test Frequency 1 kHz



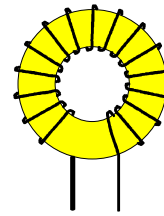
Pkg. Code	(Dimensions in inches)				
	A	B	C	D	E
1	0.560	0.810	0.187	0.126	0.510
2	0.720	0.900	0.187	0.126	0.625
3	0.955	0.975	0.187	0.126	0.775
4	1.400	1.040	0.288	0.170	1.140

Lead Free RoHS
Compliant Available
Add "LF" Suffix

DC Energy Storage Inductors

**IRON POWDER MATERIAL
(Hydrogen Reduced)**

Well Suited for Switch Mode Power
Supplies and Regulator Applications.



Single Layer Wound

Leads are Pre-Tinned

Custom Versions Available

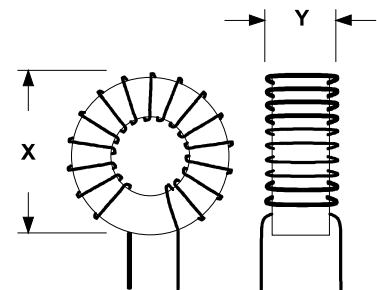
Vertical Base Mounting Available

Shrink Tubing Optional

Varnish Finish Optional

Semi-Encapsulated Versions
or Clip Mount Package Style
Available for some models

Where Imax is greater than
IDC @ 50%, Inductors can be used
for Swing requirements producing
a minimum Swing of 2:1



Bare Coil Size Chart

Size Code	Dim. in inches	
	X	Y
1	0.515	0.235
2	0.575	0.265
3	0.890	0.340
4	1.150	0.530
5	1.400	0.535
6	1.520	0.510
7	1.950	0.820
8	2.150	0.660
9	2.400	0.670

Dimensions are nominal, based upon largest wire size used with each toroid size. Smaller wire will result in slightly lower dimensions.

***Clip Mount ⁽¹⁾ Dimensions
Refer to Drawing and
Dimensions from Page 7.***

Part ⁽¹⁾ Number	L ⁽²⁾ typ. (μH)	IDC ⁽³⁾ 20% Amps	IDC ⁽⁴⁾ 50% Amps	I ⁽⁵⁾ max. Amps	Energy min. ⁽⁶⁾ (μJ)	DCR nom. (mΩ)	Size Code	Lead Size AWG
L-14400	56.3	1.15	2.73	1.38	30	183	1	28
L-14401	33.3	1.49	3.55	1.97	30	89	1	26
L-14402 (K)	17.9	2.04	4.85	2.81	30	41	1	24
L-14403	76.0	1.11	2.64	1.38	38	255	2	28
L-14404	45.2	1.44	3.43	1.97	38	124	2	26
L-14405 (K)	25.9	1.90	4.53	2.81	38	59	2	24
L-14406	231.9	1.21	2.88	1.97	136	351	3	26
L-14407	139.2	1.56	3.72	2.81	136	170	3	24
L-14408 (K)	81.1	2.05	4.87	4.00	136	82	3	22
L-14409 (K)	47.1	2.68	6.39	5.70	136	39	3	20
L-14410 (K)	36.1	3.07	7.30	6.81	136	27	3	19
L-14411	671.9	1.28	3.04	1.97	438	598	4	26
L-14412	405.1	1.64	3.91	2.81	438	290	4	24
L-14413 (K)	241.9	2.13	5.06	4.00	438	142	4	22
L-14414 (K)	141.5	2.78	6.62	5.70	438	68	4	20
L-14415 (K)	107.5	3.19	7.59	6.81	438	47	4	19
L-14416	715.7	1.47	3.50	2.81	620	469	5	24
L-14417	443.6	1.87	4.45	4.00	620	232	5	22
L-14418	272.5	2.39	5.68	5.70	620	114	5	20
L-14419	210.7	2.71	6.46	6.81	620	80	5	19
L-14420	156.8	3.14	7.49	8.11	620	55	5	18
L-14421	529.2	1.82	4.33	4.00	700	277	6	22
L-14422	316.9	2.35	5.59	5.70	700	134	6	20
L-14423	252.3	2.63	6.27	6.81	700	95	6	19
L-14424	195.1	2.99	7.13	8.11	700	66	6	18
L-14425	145.2	3.47	8.27	9.70	700	45	6	17
L-14426	876.1	2.60	6.19	5.70	2368	207	7	20
L-14427	670.8	2.97	7.07	6.81	2368	144	7	19
L-14428	530.0	3.34	7.96	8.11	2368	102	7	18
L-14429	405.8	3.82	9.09	9.70	2368	70	7	17
L-14430	312.5	4.35	10.36	11.60	2368	49	7	16
L-14431	696.3	2.50	5.95	6.81	1737	196	8	19
L-14432	545.5	2.82	6.72	8.11	1737	137	8	18
L-14433	425.4	3.19	7.61	9.70	1737	96	8	17
L-14434	331.2	3.62	8.62	11.60	1737	67	8	16
L-14435	258.4	4.10	9.76	13.80	1737	47	8	15
L-14436	758.9	2.77	6.60	8.11	2334	172	9	18
L-14437	581.0	3.17	7.54	9.70	2334	119	9	17
L-14438	466.6	3.54	8.42	11.60	2334	85	9	16
L-14439	352.8	4.07	9.68	13.80	2334	58	9	15
L-14440	275.3	4.60	10.96	16.60	2334	41	9	14

- 1) Selected Parts available in Clip Mount Style. Example: L-14402K
- 2) Typical Inductance with no DC. Tolerance of $\pm 10\%$.
See Specific data sheets for test conditions.
- 3) Current which will produce a 20% reduction in L
- 4) Current which will produce a 50% reduction in L
- 5) Maximum DC current. This value is for a 40°C temperature rise due to copper loss, with AC flux density kept to 10 Gauss or less.
(This typically represents a current ripple of less than 1%)
- 6) Energy storage capability of component in micro Joules.
Value is for 20% reduction in permeability.

POWER INDUCTORS

SENDUST MATERIAL (Al & Si & Fe)

Although higher in core loss than MPP material, Sendust has approximately 50% more energy storage capacity. Sendust has approximately 2/3 the flux density of High Flux material, but has a much lower core loss. Sendust is an ideal tradeoff between storage capacity, core loss and cost.

Core Loss @50kHz	Core Loss @100kHz	Core Loss @300kHz
5657	16000	83138

Core Loss in mW/cm³ @4000 Gauss

Core Loss Data is provided for comparison with other listed inductor materials and is for reference only.

Well Suited for Switch Mode Power Supplies and Regulator Applications.

*For Bare Coil Dimensions
Refer to Drawing and
Dimensions from Page 6*

Single Layer Wound

Leads are Pre-Tinned

Custom Versions Available

Vertical Base Mounting Available

Shrink Tubing Optional

Varnish Finish Optional

Semi-Encapsulated Versions
or Clip Mount Package Style
Available for some models

Part Number	L ⁽²⁾ typ. (μH)	IDC ⁽³⁾ 20% Amps	IDC ⁽⁴⁾ 50% Amps	Lead Size AWG	I ⁽⁵⁾ max. Amps	DCR nom. (mΩ)	Size Code
L-14700	39.5	2.20	4.94	28	1.38	183	1
L-14701	23.4	2.85	6.42	26	1.97	89	1
L-14702 (K)	12.6	3.89	8.76	24	2.81	41	1
L-14703	68.0	2.07	4.66	28	1.38	255	2
L-14704	40.4	2.68	6.04	26	1.97	124	2
L-14705 (K)	23.1	3.55	7.98	24	2.81	59	2
L-14706	199.1	2.28	5.13	26	1.97	351	3
L-14707	119.5	2.95	6.63	24	2.81	170	3
L-14708 (K)	69.7	3.86	8.68	22	4.00	82	3
L-14709 (K)	40.4	5.06	11.39	20	5.70	39	3
L-14710 (K)	31.0	5.79	13.02	19	6.81	27	3
L-14711	585.2	2.38	5.35	26	1.97	598	4
L-14712	352.8	3.06	6.89	24	2.81	290	4
L-14713 (K)	210.7	3.96	8.92	22	4.00	142	4
L-14714 (K)	123.2	5.18	11.66	20	5.70	68	4
L-14715 (K)	93.6	5.94	13.38	19	6.81	47	4
L-14716	609.7	2.76	6.21	24	2.81	469	5
L-14717	377.8	3.51	7.89	22	4.00	232	5
L-14718	232.1	4.47	10.06	20	5.70	114	5
L-14719	179.5	5.09	11.45	19	6.81	80	5
L-14720	133.6	5.90	13.27	18	8.11	55	5
L-14721	395.1	3.40	7.66	22	4.00	277	6
L-14722	236.6	4.40	9.89	20	5.70	134	6
L-14723	188.4	4.93	11.09	19	6.81	95	6
L-14724	145.7	5.60	12.61	18	8.11	66	6
L-14725	108.4	6.50	14.62	17	9.70	45	6
L-14726	741.3	4.75	10.68	20	5.70	207	7
L-14727	567.6	5.43	12.21	19	6.81	144	7
L-14728	448.4	6.10	13.74	18	8.11	102	7
L-14729	343.3	6.98	15.70	17	9.70	70	7
L-14730	264.4	7.95	17.89	16	11.60	49	7
L-14731	598.0	4.66	10.48	19	6.81	196	8
L-14732	468.4	5.26	11.84	18	8.11	137	8
L-14733	365.3	5.96	13.41	17	9.70	96	8
L-14734	284.4	6.75	15.20	16	11.60	67	8
L-14735	221.9	7.65	17.20	15	13.80	47	8
L-14736	604.0	5.17	11.64	18	8.11	172	9
L-14737	462.5	5.91	13.30	17	9.70	119	9
L-14738	371.4	6.60	14.84	16	11.60	85	9
L-14739	280.8	7.59	17.07	15	13.80	58	9
L-14740	219.1	8.59	19.32	14	16.60	41	9

1) Selected Parts available in Clip Mount Style. Example: L-14702K

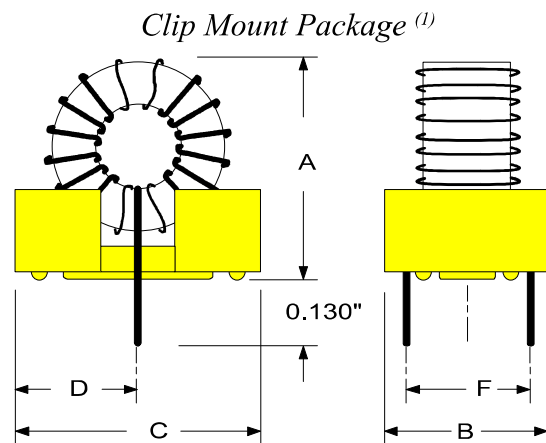
2) Typical Inductance with no DC. Tolerance of $\pm 10\%$.
See Specific data sheets for test conditions.

3) Current which will produce a 20% reduction in L

4) Current which will produce a 50% reduction in L

5) Maximum DC current. This value is for a 40°C temperature rise due to copper loss, with AC flux density kept to 10 Gauss or less. (This typically represents a current ripple of less than 1%)

*Lead Free RoHS
Compliant Available
Add "LF" Suffix*



Clip Mount Package Size Chart ⁽¹⁾

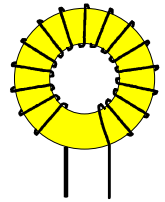
Size Code	Typical Dimensions in Inches				
	A	B	C	D	F
1	0.600	0.340	0.580	0.290	0.220
2	0.650	0.450	0.650	0.325	0.300
3	0.950	0.600	0.950	0.475	0.450
4	1.250	0.700	1.250	0.625	0.500

POWER INDUCTORS

SENDUST MATERIAL (Al & Si & Fe)

Although higher in core loss than MPP material, Sendust has approximately 50% more energy storage capacity. Sendust has approximately 2/3 the flux density of High Flux material, but has a much lower core loss. Sendust is an ideal tradeoff between storage capacity, core loss and cost.

Core Loss @50kHz	Core Loss @100kHz	Core Loss @300kHz
5657	16000	83138



Core Loss in mW/cm³ @4000 Gauss

Core Loss Data is provided for comparison with other listed inductor materials and is for reference only.

Part ⁽¹⁾ Number	L ⁽²⁾ typ. (μH)	IDC ⁽³⁾ 20% Amps	IDC ⁽⁴⁾ 50% Amps	Lead Size AWG	I ⁽⁵⁾ max. Amps	DCR nom. (mΩ)	Size Code
L-14700	39.5	2.20	4.94	28	1.38	183	1
L-14701	23.4	2.85	6.42	26	1.97	89	1
L-14702 (K)	12.6	3.89	8.76	24	2.81	41	1
L-14703	68.0	2.07	4.66	28	1.38	255	2
L-14704	40.4	2.68	6.04	26	1.97	124	2
L-14705 (K)	23.1	3.55	7.98	24	2.81	59	2
L-14706	199.1	2.28	5.13	26	1.97	351	3
L-14707	119.5	2.95	6.63	24	2.81	170	3
L-14708 (K)	69.7	3.86	8.68	22	4.00	82	3
L-14709 (K)	40.4	5.06	11.39	20	5.70	39	3
L-14710 (K)	31.0	5.79	13.02	19	6.81	27	3
L-14711	585.2	2.38	5.35	26	1.97	598	4
L-14712	352.8	3.06	6.89	24	2.81	290	4
L-14713 (K)	210.7	3.96	8.92	22	4.00	142	4
L-14714 (K)	123.2	5.18	11.66	20	5.70	68	4
L-14715 (K)	93.6	5.94	13.38	19	6.81	47	4
L-14716	609.7	2.76	6.21	24	2.81	469	5
L-14717	377.8	3.51	7.89	22	4.00	232	5
L-14718	232.1	4.47	10.06	20	5.70	114	5
L-14719	179.5	5.09	11.45	19	6.81	80	5
L-14720	133.6	5.90	13.27	18	8.11	55	5
L-14721	395.1	3.40	7.66	22	4.00	277	6
L-14722	236.6	4.40	9.89	20	5.70	134	6
L-14723	188.4	4.93	11.09	19	6.81	95	6
L-14724	145.7	5.60	12.61	18	8.11	66	6
L-14725	108.4	6.50	14.62	17	9.70	45	6
L-14726	741.3	4.75	10.68	20	5.70	207	7
L-14727	567.6	5.43	12.21	19	6.81	144	7
L-14728	448.4	6.10	13.74	18	8.11	102	7
L-14729	343.3	6.98	15.70	17	9.70	70	7
L-14730	264.4	7.95	17.89	16	11.60	49	7
L-14731	598.0	4.66	10.48	19	6.81	196	8
L-14732	468.4	5.26	11.84	18	8.11	137	8
L-14733	365.3	5.96	13.41	17	9.70	96	8
L-14734	284.4	6.75	15.20	16	11.60	67	8
L-14735	221.9	7.65	17.20	15	13.80	47	8
L-14736	604.0	5.17	11.64	18	8.11	172	9
L-14737	462.5	5.91	13.30	17	9.70	119	9
L-14738	371.4	6.60	14.84	16	11.60	85	9
L-14739	280.8	7.59	17.07	15	13.80	58	9
L-14740	219.1	8.59	19.32	14	16.60	41	9

- 1) Selected Parts available in Clip Mount Style. Example: L-14702K
- 2) Typical Inductance with no DC. Tolerance of $\pm 10\%$.
See Specific data sheets for test conditions.
- 3) Current which will produce a 20% reduction in L
- 4) Current which will produce a 50% reduction in L
- 5) Maximum DC current. This value is for a 40°C temperature rise due to copper loss, with AC flux density kept to 10 Gauss or less. (This typically represents a current ripple of less than 1%)

Lead Free RoHS
Compliant Available
Add "LF" Suffix

Well Suited for Switch Mode Power Supplies and Regulator Applications.

*For Bare Coil Dimensions
Refer to Drawing and
Dimensions from Page 6*

Single Layer Wound

Leads are Pre-Tinned

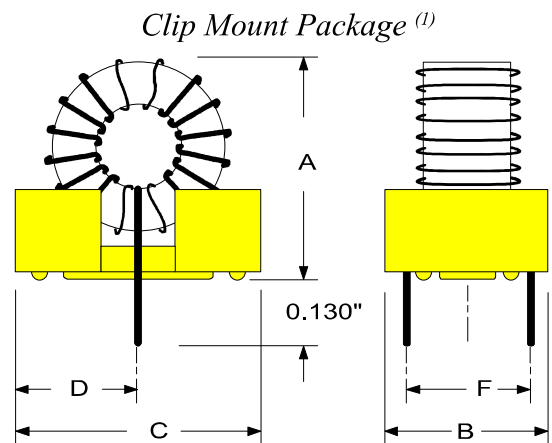
Custom Versions Available

Vertical Base Mounting Available

Shrink Tubing Optional

Varnish Finish Optional

Semi-Encapsulated Versions
or Clip Mount Package Style
Available for some models



Clip Mount Package Size Chart ⁽¹⁾

Size Code	Typical Dimensions in Inches				
	A	B	C	D	F
1	0.600	0.340	0.580	0.290	0.220
2	0.650	0.450	0.650	0.325	0.300
3	0.950	0.600	0.950	0.475	0.450
4	1.250	0.700	1.250	0.625	0.500

High Swing Inductors

Single Layer Wound

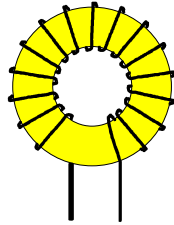
Leads are Pre-Tinned

Shrink Tubing Optional

Varnish Finish Optional

Custom Versions Available

Vertical Base Mounting Available



Well Suited for Switch Mode Power Supplies and other applications requiring large changes in Inductance vs. large changes in Current

Composite Material

2/3 Hydrogen Reduced Powdered Iron and 1/3 Power Ferrite

From 10:1 to greater than 20:1 Inductance Swing From Zero to Maximum Current

Part Number	L ⁽¹⁾ Typ. (mH)	IDC ⁽²⁾ 10% (mA)	IDC ⁽²⁾ 20% (mA)	IDC ⁽²⁾ 30% (mA)	IDC ⁽²⁾ 40% (mA)	IDC ⁽²⁾ 50% (mA)	IDC ⁽²⁾ 70% (mA)	IDC ⁽²⁾ 90% (mA)	IDC ⁽²⁾ 95% (mA)	Lead Size AWG	I ⁽³⁾ Max. (mA)	DCR Nom. (Ω)	Size Code
L-14800	7.13	4.0	6.0	8.0	10.0	14.0	24.0	80	600	36	335	3.50	10
L-14801	4.51	5.0	7.5	10.1	12.6	17.6	30.2	101	754	34	478	1.75	10
L-14802	2.69	6.5	9.8	13.0	16.3	22.8	39.1	130	976	32	680	0.83	10
L-14803	1.70	8.2	12.3	16.4	20.5	28.7	49.1	164	1228	30	969	0.41	10
L-14804	1.02	10.6	15.9	21.2	26.4	37.0	63.5	212	1587	28	1380	0.20	10
L-14805	16.30	5.3	7.9	10.6	13.2	18.5	31.7	106	791	34	478	3.00	11
L-14806	12.52	6.0	9.0	12.0	15.0	21.1	36.1	120	903	32	680	1.63	11
L-14807	8.07	7.5	11.2	15.0	18.7	26.2	45.0	150	1125	30	969	0.81	11
L-14808	5.14	9.4	14.1	18.8	23.5	32.9	56.4	188	1409	28	1380	0.40	11
L-14809	3.13	12.0	18.1	24.1	30.1	42.1	72.2	241	1806	26	2000	0.19	11
L-14810	22.33	6.1	9.2	12.3	15.4	21.5	36.9	123	922	32	680	3.00	12
L-14811	14.42	7.7	11.5	15.3	19.1	26.8	45.9	153	1148	30	969	1.49	12
L-14812	9.23	9.6	14.3	19.1	23.9	33.5	57.4	191	1435	28	1380	0.74	12
L-14813	5.71	12.2	18.2	24.3	30.4	42.5	72.9	243	1823	26	2000	0.36	12
L-14814	3.45	15.7	23.5	31.3	39.1	54.8	93.9	313	2348	24	2810	0.17	12
L-14815	35.26	8.8	13.2	17.6	22.0	30.7	52.7	176	1317	30	969	3.10	13
L-14816	27.45	10.0	14.9	19.9	24.9	34.8	59.7	199	1493	28	1380	1.70	13
L-14817	22.23	11.1	16.6	22.1	27.6	38.7	66.3	221	1659	26	2000	0.95	13
L-14818	13.71	14.1	21.1	28.2	35.2	49.3	84.5	282	2113	24	2810	0.46	13
L-14819	8.61	17.8	26.7	35.5	44.4	62.2	106.6	355	2666	22	4000	0.23	13
L-14820	40.40	11.6	17.4	23.2	29.1	40.7	69.7	232	1744	28	1380	2.20	14
L-14821	35.56	12.4	18.6	24.8	31.0	43.4	74.3	248	1858	26	2000	1.28	14
L-14822	31.43	13.2	19.8	26.4	32.9	46.1	79.1	264	1977	24	2810	0.75	14
L-14823	19.60	16.7	25.0	33.4	41.7	58.4	100.1	334	2503	22	4000	0.37	14
L-14824	12.25	21.1	31.7	42.2	52.8	73.9	126.7	422	3167	20	5700	0.18	14

- 1) Typical Inductance with no DC. Tolerance of +30% / -20% Request detailed data sheets for specific test conditions.
- 2) Current which will produce the specified percentage reduction in Inductance.
- 3) Maximum DC current. This value is for a 40°C temperature rise due to copper loss.

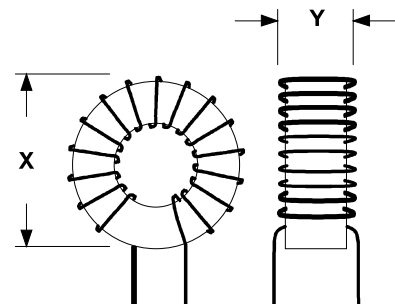
Where I_{MAX} is greater than IDC @90%, the Inductors can be used for Swing Requirements producing a minimum Swing of 10:1.

Where I_{MAX} is greater than IDC @95%, the Inductors can be used for Swing Requirements producing a minimum Swing of 20:1.

Lead Free RoHS
Compliant Available
Add "LF" Suffix

Bare Coil Size Chart

Size Code	Dim. in inches	
	X	Y
10	0.575	0.345
11	0.910	0.470
12	1.100	0.550
13	1.600	0.700
14	2.100	0.860



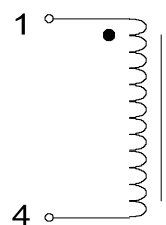
Dimensions are nominal, based upon largest wire size used with each toroid size. Smaller wire will result in slightly lower dimensions.

Low Power Inductors

Designed for General Purpose Applications such as Low Power Ripple Filters, or where Inductance Stability with variation in load currents is required.

Horizontal and Vertical Package Styles

Schematic



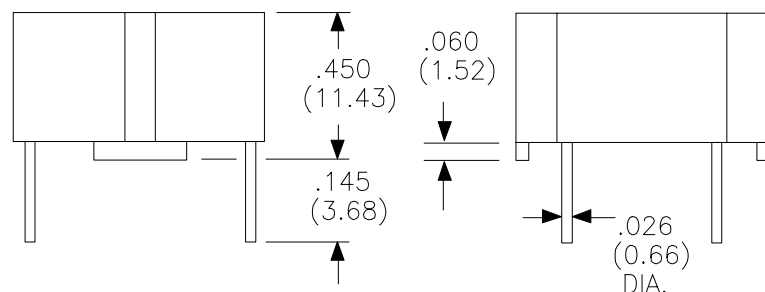
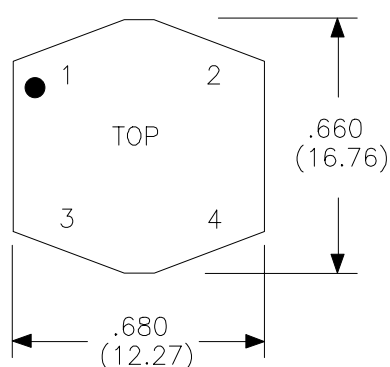
Electrical Specifications at 25°C

Horiz. Part Number	Vert. Part Number	L Typ. (μ H)	I * DC (Amps)	ET Typ. (V- μ S)	DCR Max. (Ω)	Energy Typ. (μ J)	Test Volts 1 kHz (No DC) (mV)
L-11500	L-11520	150	1.70	80	0.36	215	50
L-11501	L-11521	220	1.50	90	0.38	240	70
L-11502	L-11522	330	1.00	100	0.74	165	80
L-11503	L-11523	470	0.90	120	1.10	190	100
L-11504	L-11524	680	0.85	175	1.25	245	120
L-11505	L-11525	820	0.75	175	2.30	230	130
L-11506	L-11526	1000	0.50	175	2.40	125	140

* Rated for 40°C Temp. Rise

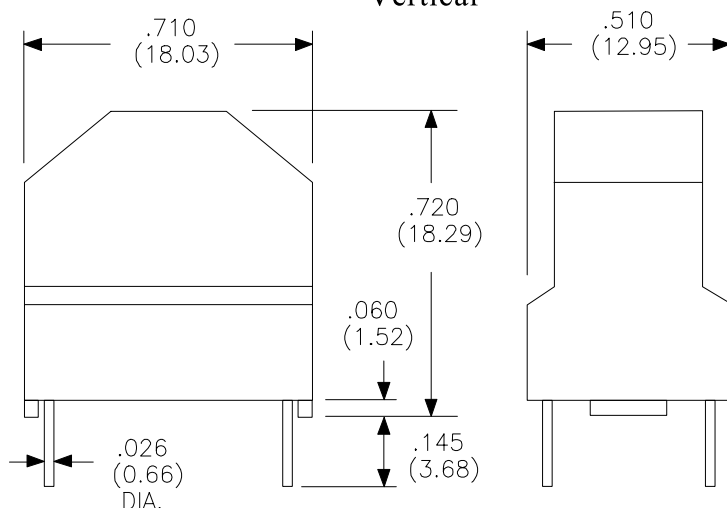
RoHS Compliant Available
Add "R" Suffix

Physical Dimensions
inches (mm)

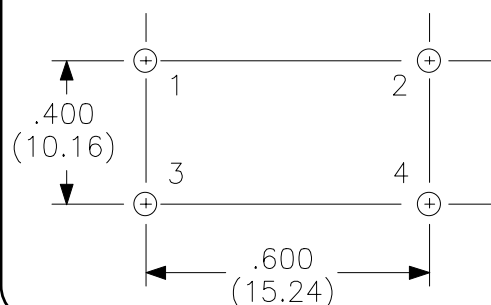


Horizontal

Vertical



Footprint
(Horiz. & Vert.)



Low Power Inductors (Miniature)

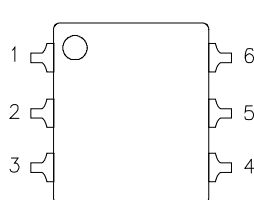
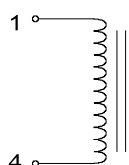
Designed for General Purpose Applications such as Low Power Ripple Filters, or where Inductance Stability with variation in load currents is required.

RoHS Compliant Available
Add "R" Suffix

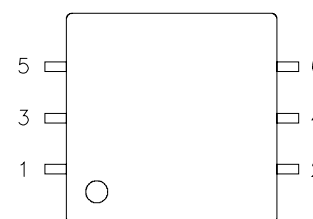
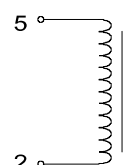
Electrical Specifications at 25°C

Thru-hole Part Number	SMD Part Number	L Nom. (μH)	I Max. (A)	DCR Nom. (mΩ)	Fux Density (V-μS)	DIP/SMD Package Type	Schematic Style
L-14900	L-14900G	7.5	0.35	110	2.6	D6 / G6	A
L-14901	L-14901G	10.4	0.29	162	3.1	D6 / G6	A
L-14902	L-14902G	15.0	0.25	240	3.7	D6 / G6	A
L-14903	L-14903G	19.0	0.22	341	4.1	D6 / G6	A
L-14904	L-14904G	36.5	0.36	267	13.2	T6 / G6-Wide	B
L-14905	L-14905G	48.1	0.32	389	15.2	T6 / G6-Wide	B
L-14906	L-14906G	61.3	0.28	550	17.1	T6 / G6-Wide	B
L-14907	L-14907G	80.0	0.24	776	19.6	T6 / G6-Wide	B
L-14908	L-14908G	105.8	0.21	1130	22.5	T6 / G6-Wide	B

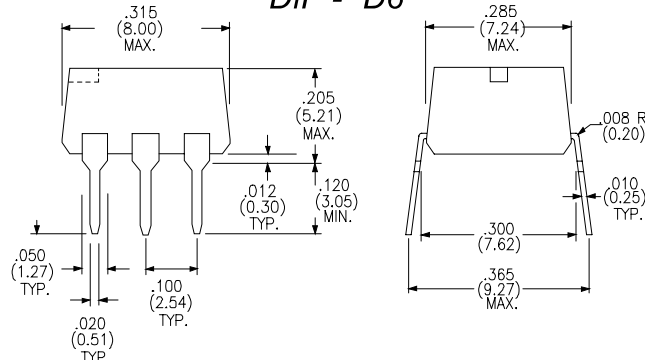
Schematic Style "A"



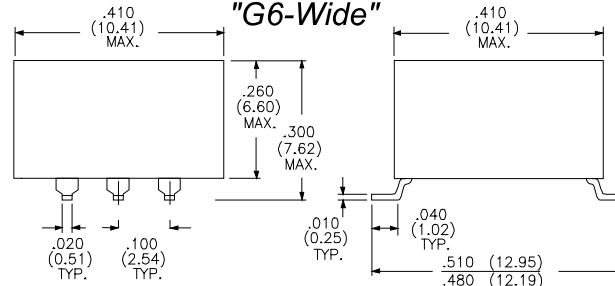
Schematic Style "B"



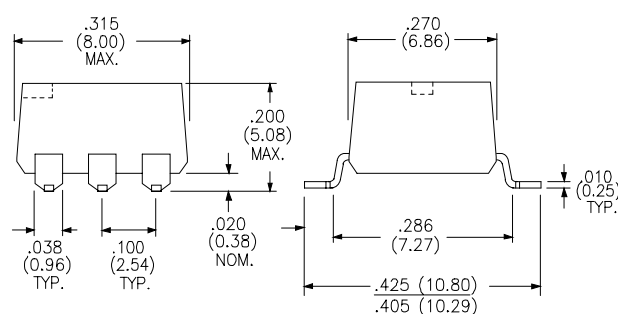
DIP - "D6"



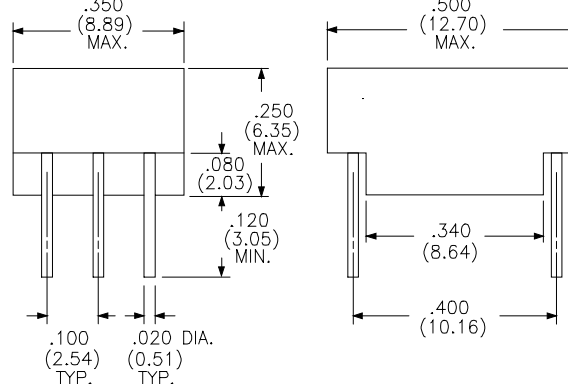
"G6-Wide"



6-Pin Gullwing - "G6"



"T6"



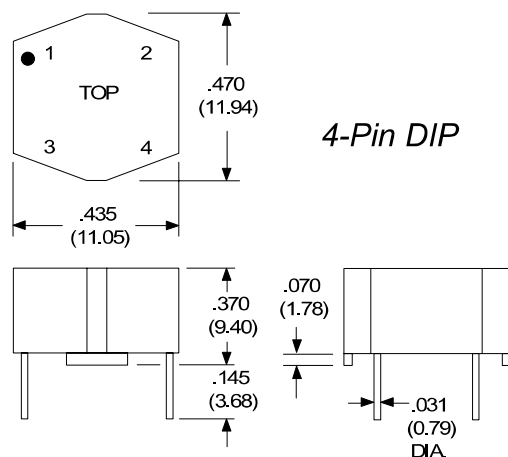
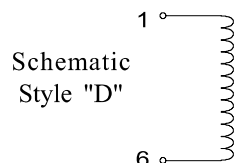
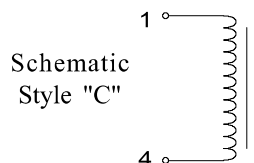
Low Power Inductors (Miniature)

Designed for General Purpose Applications such as Low Power Ripple Filters, or where Inductance Stability with variation in load currents is required.

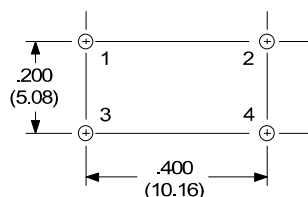
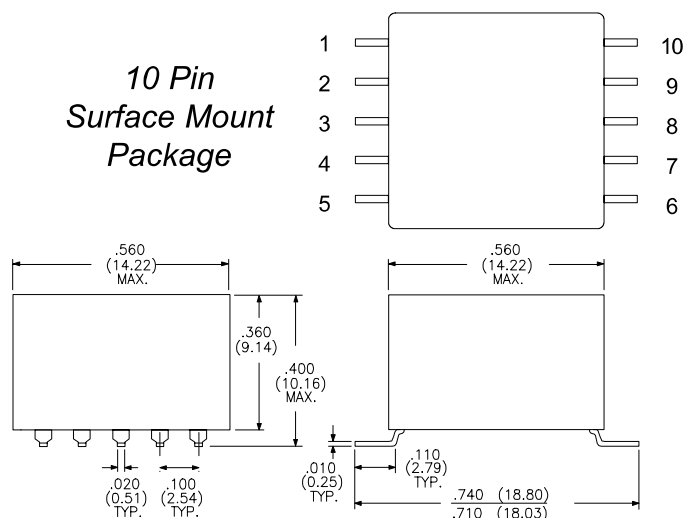
*RoHS Compliant Available
Add "R" Suffix*

Electrical Specifications at 25°C

Thru-hole Part Number	SMD Part Number	L Nom. (μH)	I Max. (A)	DCR Nom. (mΩ)	Fux Density (V-μS)	DIP/SMD Package Type	Schematic Style
L-14909		75.1	0.34	326	25.4	4-Pin / na	C
L-14910		100.7	0.29	479	29.4	4-Pin / na	C
L-14911		135.3	0.25	704	34.1	4-Pin / na	C
L-14912		168.9	0.23	986	38.1	4-Pin / na	C
L-14913		219.7	0.20	1390	43.5	4-Pin / na	C
L-14914	L-14914G	102.6	0.36	319	36.6	10-Pin / G10-Wide	D
L-14915	L-14915G	132.5	0.31	461	41.6	10-Pin / G10-Wide	D
L-14916	L-14916G	178.3	0.27	678	48.2	10-Pin / G10-Wide	D
L-14917	L-14917G	223.9	0.24	964	54.1	10-Pin / G10-Wide	D
L-14918	L-14918G	290.2	0.21	1380	61.6	10-Pin / G10-Wide	D

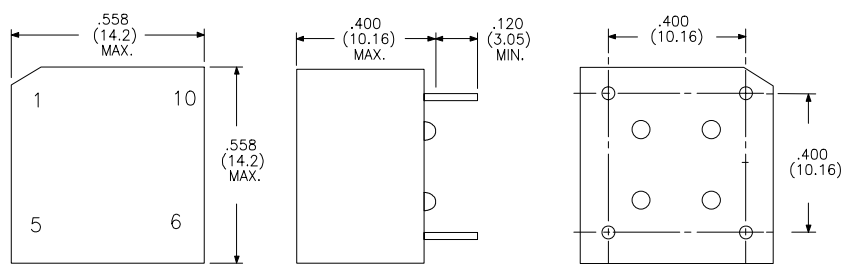


10 Pin Surface Mount Package



*RoHS Compliant Available
Add "R" Suffix*

10-Pin DIP



High Current Inductors

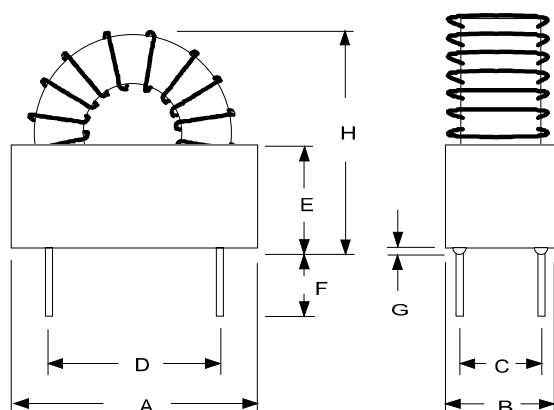
Toroid Style / Semi-Potted
Single Layered Design

Semi-Potted designed for ease of handling.

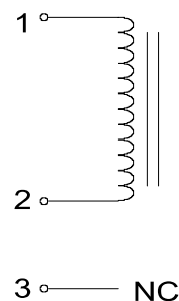
Good Inductance stability
over temperature range
of -55° to +70° C

Electrical Specifications at 25°C

Part Number	L Min. (μH)	I _{DC} Max. (A)	ET-OP (V-μS)		L (No DC) ±20% (μH)	Test Level (mV)	Energy Storage (mJ Min)	DCR Max. (mΩ)	Size Code	Lead Size (AWG)
			20KHz	40KHz						
L-20451	17	17.0	190	130	40.0	140	2460	6.5	3	12
L-20452	32	16.0	290	200	70.7	270	4100	9.2	4	12
L-20453	60	16.0	390	270	120.0	470	7700	12.0	5	12
L-20454	14	10.0	135	95	28.5	73	700	9.0	1	15
L-20455	23	11.0	170	120	43.5	130	1400	12.0	2	15
L-20456	43	10.0	280	195	85.5	210	2150	18.0	3	15
L-20457	90	10.0	430	300	158.0	420	4500	28.0	4	15
L-20458	144	10.0	570	400	262.0	700	7200	32.0	5	15
L-20459	32	6.6	200	140	60.5	110	700	25.0	1	18
L-20460	52	7.0	230	160	92.0	190	1275	32.0	2	18
L-20461	98	6.0	400	280	188.0	310	1765	48.0	3	18
L-20462	175	6.0	620	425	315.0	560	3150	68.0	4	18
L-20463	335	6.0	840	580	571.0	1000	6030	95.0	5	18
L-20464	400	3.6	600	420	688.0	640	2700	130.0	3	19



Schematic Diagram



Bottom View



*Lead Free RoHS
Compliant Available
Add "LF" Suffix*

Size Code	Nominal Dimensions in Inches							
	A	B	C	D	E	F	G	H
1	1.20	0.60	0.40	0.80	0.45	0.20	.015	1.20
2	1.44	0.80	0.60	0.90	0.70	0.20	.030	1.44
3	1.60	0.80	0.60	0.90	0.70	0.20	.030	1.72
4	1.95	0.91	0.70	1.20	0.90	0.20	.030	2.00
5	2.30	1.11	0.90	1.50	1.00	0.20	.030	2.30

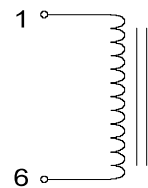
EFD & EP Style Inductors

Multi Purpose / High Inductance
EFD Style for Low Profile Applications
EP Style offers excellent Self-Shielding
Other sizes and Inductance values available
EP style available in surface mount

Electrical Specifications at 25°C

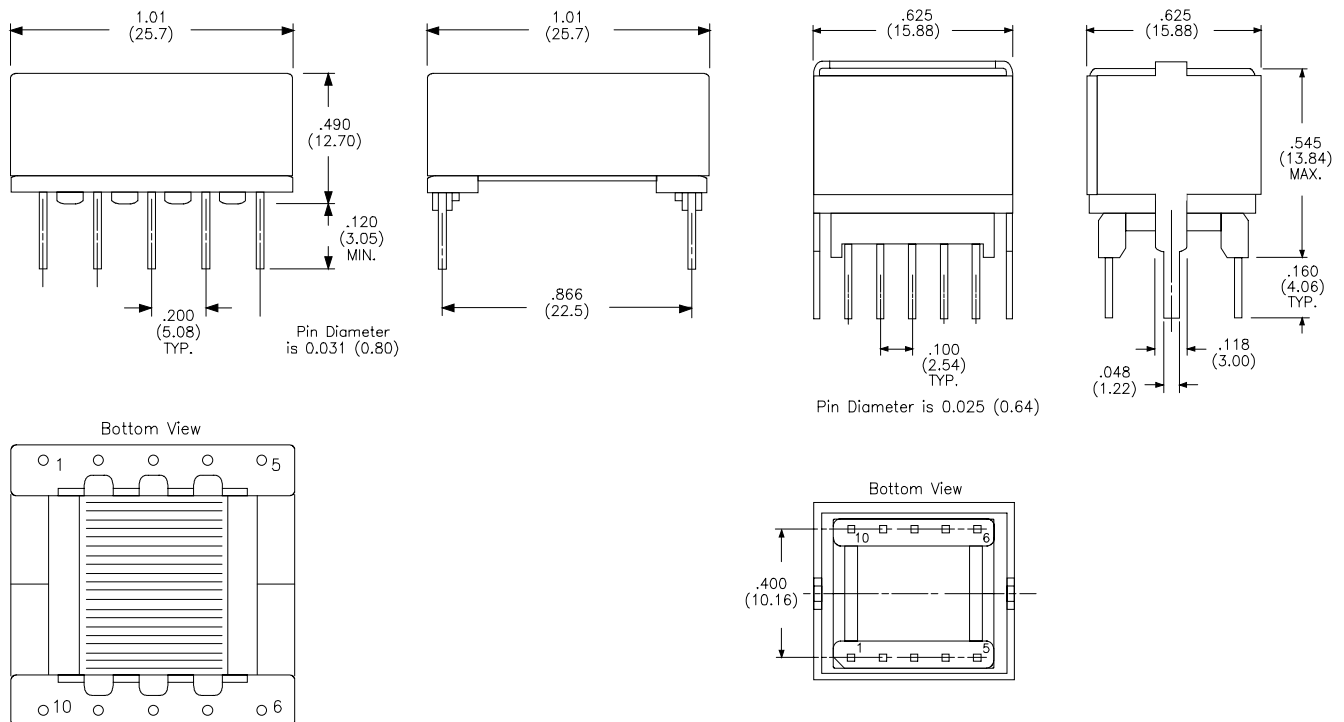
Part Number	L Nom. (mH)	I Rating (A)	DCR Nom (Ohms)	Flux Density (V-μS)	Style	Schem
L-37151	640.00	0.12	90.0	9000	EFD	A
L-37152	313.60	0.17	41.0	6300	EFD	A
L-37153	102.40	0.30	14.5	3600	EFD	A
L-37154	40.00	0.48	5.5	2250	EFD	A
L-37155	25.60	0.60	2.8	1800	EFD	A
L-37156	6.40	1.00	0.7	900	EFD	A
L-37157	1.60	2.00	0.4	450	EFD	A
L-37158	0.40	4.00	0.1	225	EFD	A
L-37401	46.24	0.09	31.9	4149	EP	B
L-37402	18.06	0.14	12.4	2593	EP	B
L-37403	6.92	0.22	5.0	1605	EP	B
L-37404	3.17	0.33	2.1	1086	EP	B
L-37405	1.42	0.49	0.9	726	EP	B
L-37406	0.64	0.73	0.4	488	EP	B
L-37407	0.26	1.14	0.1	311	EP	B

Schematic



*RoHS Compliant
Available
Add "R" Suffix*

Physical Dimensions
inches (mm)



*Lead Free RoHS Compliant
Available Add "LF" Suffix*

M21

High L Mini Inductors

High Inductance - Low Current

Designed for Noise, Spike and Filtering applications

Leads #22 AWG Tinned Copper

Coils finished with Polyolefin Shrink Tube

RoHS Compliant Available -- Add "R" Suffix

Package
Dimensions
Inches (mm)

.285
(7.24)
MAX.

Height
dimensions
are without
solder joint
or coatings

1.30
(33.0)
TYP.

.185
(4.70)
TYP.

.330
(8.38)
MAX.

Part Number	L min. * (0DC) (mH)	DCR Max. (Ω)	I ** Max (mA)	Part Number	L min. * (0DC) (mH)	DCR Max. (Ω)	I ** Max (mA)
L-13300	1.0	3.1	132	L-13312	12.0	33.0	41
L-13301	1.2	4.0	132	L-13313	15.0	37.0	41
L-13302	1.5	6.1	83	L-13314	18.0	40.0	41
L-13303	1.8	6.4	83	L-13315	22.0	56.0	32
L-13304	2.2	6.8	83	L-13316	27.0	62.0	32
L-13305	2.7	7.7	83	L-13317	33.0	70.0	32
L-13306	3.3	9.0	53	L-13318	47.0	99.0	32
L-13307	4.7	16.0	53	L-13319	56.0	135.0	21
L-13308	5.6	18.0	53	L-13320	68.0	150.0	21
L-13309	6.8	19.0	53	L-13321	82.0	212.0	21
L-13310	8.2	21.0	53	L-13322	100.0	235.0	21
L-13311	10.0	25.0	41				

* Tested at 10kHz & 100mV

** 300 CM/A

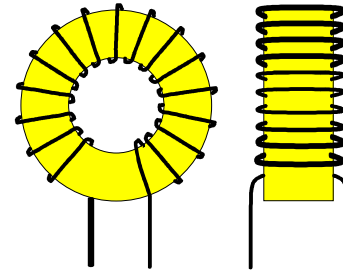
Variations on electrical parameters of the parts listed are available. Please contact factory.

High L Multi-purpose Toroid Inductors

High Inductance low current applications

Open wound and self leaded -- Mounting is available

Varnish coated -- Wound on ferrite material



Electrical Specifications at 25°C

Part Number	L typ. ⁽¹⁾ (mH)	DCR nom. (Ω)	I Max. ⁽²⁾ (Amps)	I Sat. (mA)	O.D. nom. (in.)	I.D. nom. (in.)	HT. nom. (in.)	Lead Size AWG
L-11300	1.0	0.21	1.30	280	0.980	0.450	0.340	24
L-11301	2.0	0.41	1.30	200	0.980	0.450	0.340	24
L-11302	5.0	0.76	1.30	125	0.980	0.450	0.340	24
L-11303	10.0	1.30	0.85	91	0.975	0.445	0.335	26
L-11304	20.0	2.00	0.85	64	0.975	0.445	0.335	26
L-11305	50.0	2.80	0.33	40	0.945	0.445	0.285	30
L-11306	100	5.40	0.21	28	1.080	0.440	0.365	32
L-11307	200	10.40	0.21	20	1.080	0.440	0.365	32
L-11308	300	12.80	0.21	16	1.080	0.440	0.365	32
L-11309	500	18.40	0.13	13	0.955	0.455	0.305	34
L-11310	1000	22.10	0.13	9	0.955	0.455	0.305	34
L-11311	2000	28.80	0.13	6	0.955	0.455	0.305	34

1. L measured at 1 kHz 0ADC

2. 300 CM/A

A large variety of ferrite toroids are available for custom designs. Please send your requirements by fax today for quotation.

Lead Free RoHS Compliant
Available Add "LF" Suffix

Common Mode Inductors

EE Style

Lead Free RoHS Compliant
Available Add "LF" Suffix

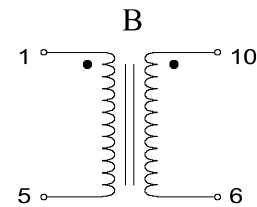
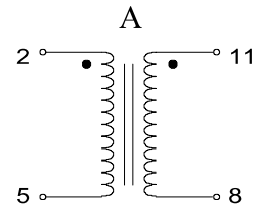
Designed to prevent noise emission in switching power supplies at input.

Windings balanced to 1%

Isolation 2500 V_{RMS}

"EE" Part Number	L ⁽¹⁾ Min. (mH)	DCR Max. (mΩ)	I ⁽²⁾ Max. (A)	L _L typ. (μH)	Size Code	SRF KHz
L-14000	4.40	49	5.50	45	A	575
L-14001	6.90	77	4.40	70	A	492
L-14002	10.90	122	3.50	125	A	385
L-14003	17.80	196	2.70	180	A	273
L-14004	28.60	316	2.20	300	A	222
L-14005	43.60	489	1.75	440	A	153
L-14006	70.30	785	1.38	720	A	161
L-14007	111.60	1240	1.10	1100	A	110
L-14008	176.10	1980	0.09	1800	A	101
L-14009	1.05	50	2.50	9	B	1443
L-14010	2.37	80	2.00	14	B	1110
L-14011	3.80	127	1.60	25	B	805
L-14012	6.00	202	1.28	36	B	630
L-14013	9.80	319	1.00	60	B	424
L-14014	16.00	500	0.80	90	B	391
L-14015	27.70	820	0.63	144	B	289
L-14016	40.50	1260	0.50	240	B	250
L-14017	63.50	2020	0.40	360	B	190

EE Style Schematics

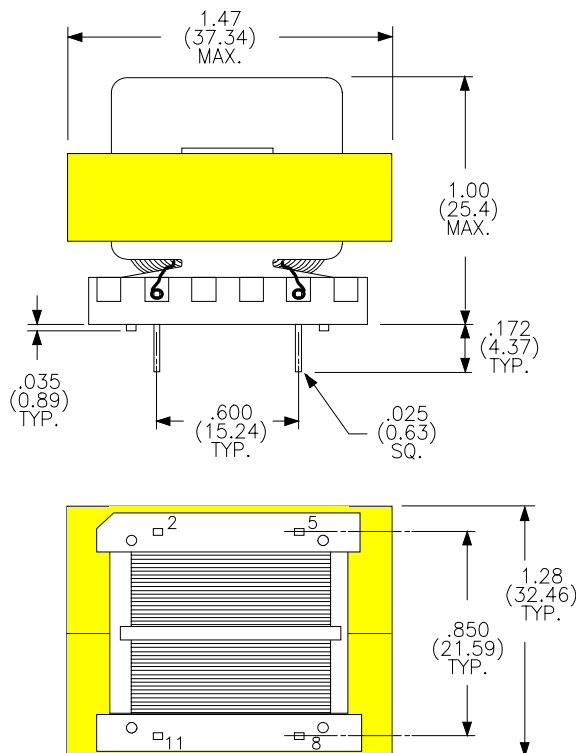


Test Conditions

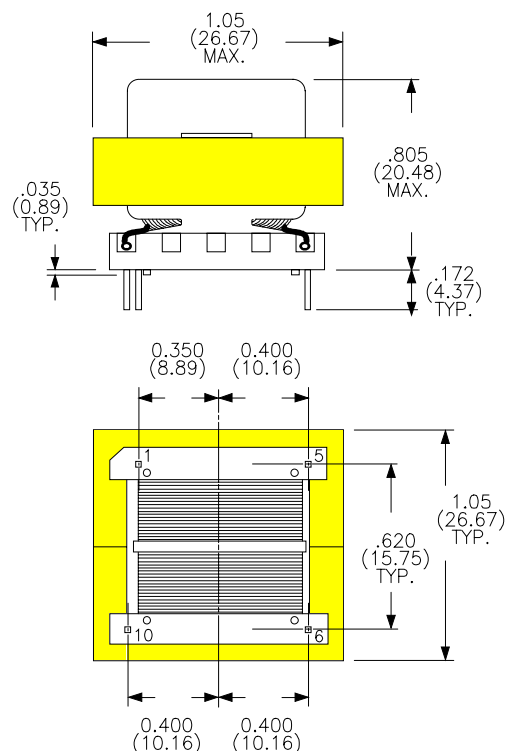
1. Tested at 10 kHz & 100mV
2. 40°C temperature rise

Size "A" - EE 12 Pin
(Unused Pins Removed)

Physical Dimensions
in inches (mm)



Size "B" - EE 10 Pin
(Unused Pins Removed)



M21

Common Mode Inductors

EE Style

Lead Free RoHS Compliant
Available Add "LF" Suffix

Designed to prevent noise emission in switching power supplies at input.

Windings balanced to 1%

Isolation 2500 V_{RMS}

"EE" Part Number	L ⁽¹⁾ Min. (mH)	DCR Max. (mΩ)	I ⁽²⁾ Max. (A)	L _L typ. (μH)	Size Code	SRF kHz
L-16004	0.100	25	2.80	6	C	6043
L-16005	0.120	28	2.80	7	C	5400
L-16006	0.150	30	2.80	8	C	4807
L-16007	0.180	38	2.20	8	C	4437
L-16008	0.220	44	2.20	9	C	3970
L-16009	0.270	51	2.20	10	C	3729
L-16010	0.330	58	1.70	11	C	2260
L-16011	0.470	78	1.40	16	C	3037
L-16012	0.560	91	1.40	18	C	2672
L-16013	0.680	115	1.10	20	C	2246
L-16014	0.820	131	1.10	25	C	2000
L-16015	1.000	194	0.88	35	C	1865
L-16016	1.200	219	0.88	47	C	1523
L-16017	1.500	278	0.70	49	C	1225
L-16018	1.800	306	0.70	59	C	1044
L-16019	2.200	431	0.55	76	C	1100
L-16020	2.700	469	0.55	91	C	950
L-16021	3.300	531	0.55	101	C	770
L-16022	3.900	669	0.44	135	C	765
L-16023	4.700	760	0.44	158	C	687
L-16024	5.600	853	0.44	196	C	625
L-16025	6.800	1240	0.35	257	C	569
L-16026	8.200	1400	0.35	296	C	485
L-16027	10.000	1610	0.35	362	C	372
L-16028	12.000	1980	0.27	410	C	367
L-16029	15.000	2240	0.27	503	C	345
L-16030	18.000	2450	0.27	602	C	301
L-16031	22.000	3490	0.22	730	C	217
L-16032	27.000	4600	0.17	870	C	208
L-16033	33.000	5210	0.17	1150	C	216
L-16034	39.000	7190	0.13	1300	C	202
L-16035	47.000	7800	0.13	1541	C	179
L-16036	56.000	8690	0.13	1875	C	175

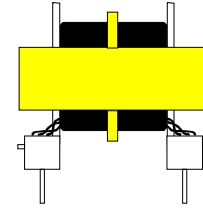
Test Conditions

1. Tested at 10 kHz & 100mV
2. 40°C temperature rise

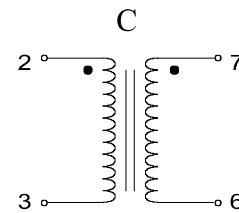
Lead Free RoHS Compliant
Available Add "LF" Suffix

Physical Dimensions
in inches (mm)

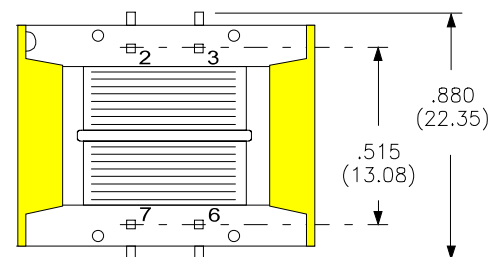
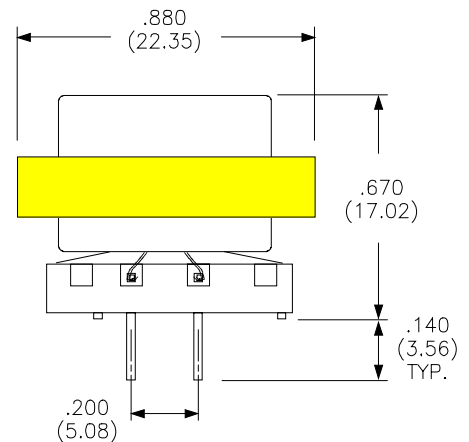
NEW SMALLER SIZE! "C"



EE Style Schematics



Size "C" - EE 8 Pin
(Unused Pins Removed)



Common Mode Inductors

UU Style

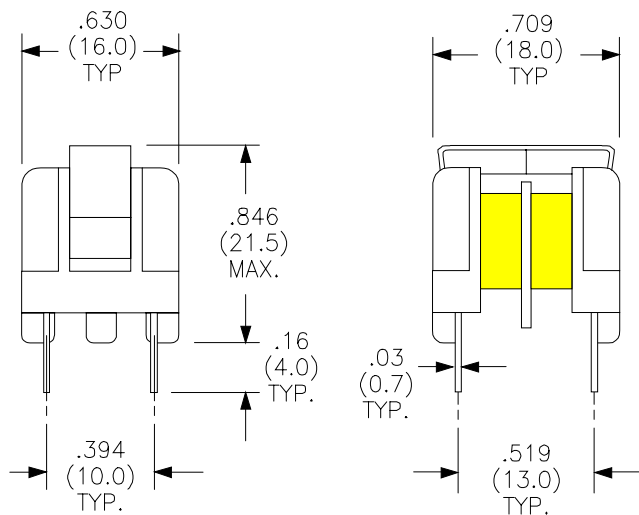
Designed to prevent noise emission in
switching power supplies at input.

Windings balanced to 1%

Isolation 2500 V_{RMS}

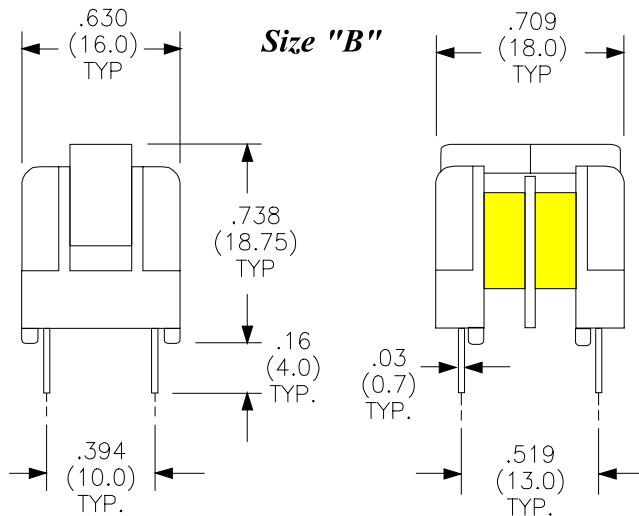
"UU" Package Dimensions in inches (mm)

Size "A"

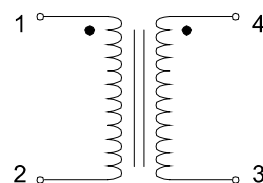


NEW ! LowProfile

Size "B"



UU Style Schematic



"UU" Part Number	L ⁽¹⁾ Min. (mH)	DCR Max. (Ω)	I ⁽²⁾ Max. (A)	SRF (kHz)	Size Code
L-14200	10.0	3.00	0.30	587	A
L-14201	5.0	2.00	0.30	730	A
L-14202	5.0	1.50	0.50	716	A
L-14203	4.0	1.00	0.70	905	A
L-14204	3.0	0.50	1.00	956	A
L-14205	2.0	0.50	1.00	1254	A
L-14206	1.0	0.40	1.00	1305	A
L-14207	1.0	0.30	1.30	1403	A
L-14208	1.0	0.20	1.50	2101	A
L-14209	0.6	0.15	2.00	2210	A
L-14250	33.0	3.5	0.3	0.15	B
L-14251	22.0	2.0	0.4	0.2	B
L-14252	15.0	1.5	0.5	0.25	B
L-14253	10.0	1.5	0.5	0.3	B
L-14254	8.0	1.0	0.5	0.3	B
L-14255	5.0	0.7	0.6	0.4	B
L-14256	6.0	0.5	0.8	0.4	B
L-14257	3.0	0.35	1.0	0.5	B
L-14258	2.0	0.3	1.0	0.7	B
L-14259	1.0	0.25	1.0	1.0	B
L-14260	3.2	0.3	1.2	0.5	B
L-14261	1.5	0.2	2.0	0.9	B
L-14262	1.0	0.15	2.0	1.0	B

1. Tested at 10 kHz & 100mV

2. 40°C temperature rise.

Lead Free RoHS Compliant
Available Add "LF" Suffix

Common Mode Inductors

SEMI-POTTED VERTICAL STYLE

Single Layer Windings with Spacers specially designed by Rhombus Industries to provide 3mm Creepage and Clearance for International Safety Compliance.

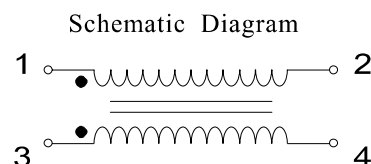
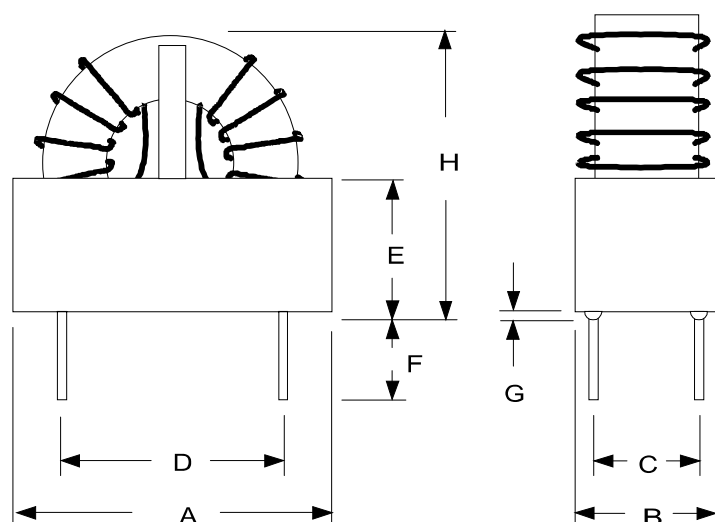
Designed to prevent noise emission in switching power supplies at input.

Windings balanced to 1%

Isolation 1250 VRMS

Materials used in the construction of these parts are UL 94 VO and are rated at 130° C or better

Part Number Vertical	I Max. (A)	L mHy Min. @1 KHz	Test Level V_{RMS} @1 KHz	L_L Max. (μ H)	DCR Max. (m Ω)	Leads (AWG)	Size Code
L-251	1.8	10	0.50	130	240	20	V1
L-252	3.5	3	0.20	35	60	20	V1
L-253	6.0	1	0.08	12	20	19	V1
L-254	2.6	16	1.00	180	160	18	V2
L-255	3.2	8	0.50	90	120	18	V2
L-256	5.2	4	0.20	45	40	19	V2
L-257	7.5	2	0.08	25	20	17	V2



Lead Free RoHS Compliant
Available Add "LF" Suffix

Size Code	Typical Dimension in Inches							
	A	B	C	D	E	F	G	H
V1	1.150	0.550	0.400	0.800	0.450	0.200	.015	1.150
V2	1.440	0.800	0.600	0.900	0.700	0.200	.030	1.500

Common Mode Inductors

POTTED HORIZONTAL STYLE

Single Layer Windings with Spacers specially designed by Rhombus Industries to provide 3mm Creepage and Clearance for International Safety Compliance.

Designed to prevent noise emission in switching power supplies at input.

Windings balanced to 1%

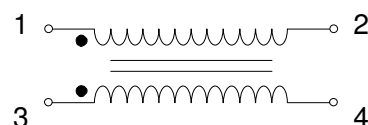
Isolation 1250 VRMS

Materials used in the construction of these parts are UL 94 VO and are rated at 130° C or better

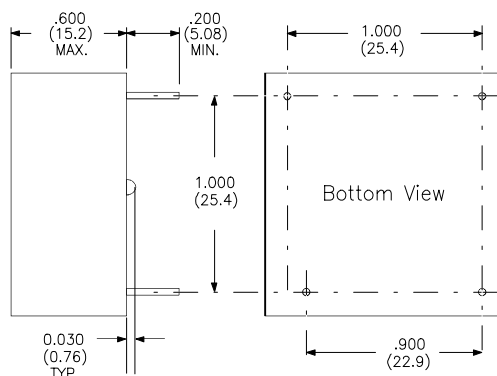
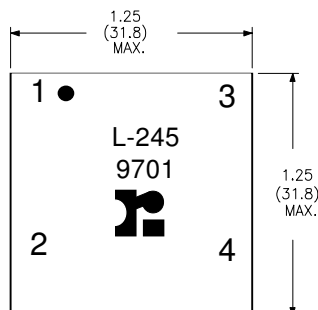
Part Number Horiz.	I Max. (A)	L mHy Min @1 KHz	Test Level V_{RMS} @1 KHz	L_L Max. (μ H)	DCR Max. (m Ω)	Leads (AWG)	Size Code
L-244	1.8	10	0.50	130	240	20	H1
L-245	3.5	3	0.20	35	60	20	H1
L-246	6.0	1	0.08	12	20	19	H1
L-247	2.6	16	1.00	180	160	18	H2
L-248	3.2	8	0.50	90	120	18	H2
L-249	5.2	4	0.20	45	40	19	H2
L-250	7.5	2	0.08	25	20	17	H2

RoHS Compliant Available
Add "R" Suffix

Schematic Diagram

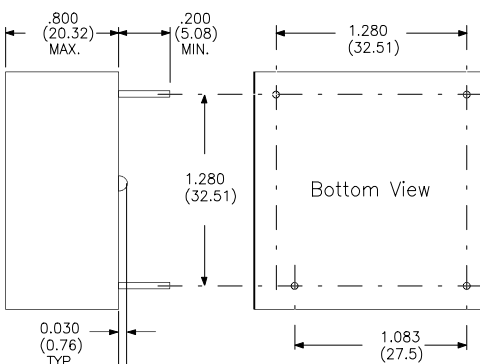
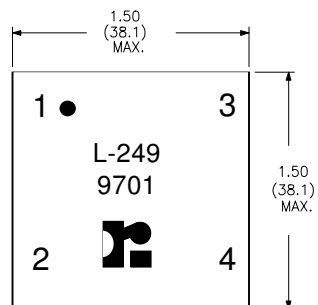


Schematic Diagram



Size
Code "H1"

(Low Profile
Horizontal)



Size
Code "H2"

(Low Profile
Horizontal)

Common Mode Inductors *Toroidal Style*

Designed for Switching
Power Supply Applications.

Especially useful in the
100 kHz to 300kHz Range.

1250 V_{RMS} HI-POT

Single Layer Windings with Spacers specially designed by Rhombus Industries to provide 3mm Creepage and Clearance for International Safety Compliance.

Operating Temperature: These parts are made with materials rated for 130°C minimum, and these components can be safely operated up to 130°C. *

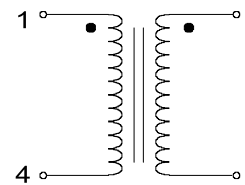
Lead Free RoHS Compliant
Available Add "LF" Suffix

Part Number	L Min. (μH)	DCR Max. (mΩ)	I Max. (A)	L _L typ. (μH)	SRF (kHz)	Size Code
L-14100	3500	150	1.3	62	500	A
L-14101	1700	65	2.0	32	850	A
L-14102	1000	36	3.2	22	1250	A
L-14103	750	22	5.0	19	1300	A
L-14104	275	8	13.0	8	2000	A
L-14105	10800	290	1.30	165	125	B
L-14106	7000	150	2.00	100	225	B
L-14107	3700	80	3.20	60	400	B
L-14108	2200	40	5.00	35	600	B
L-14109	580	10	13.00	10	1150	B

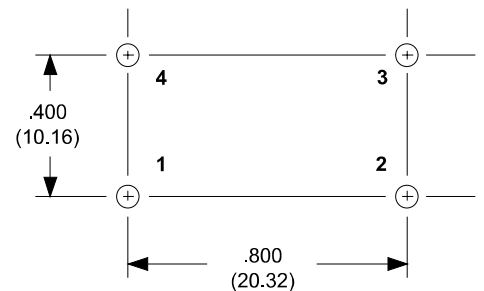
* AMBIENT + TEMPERATURE RISE. In addition, inductance will be effected by an increase in temperature. Typically:

20% increase to 50°C
40% increase to 100°C
65% increase to 130°C

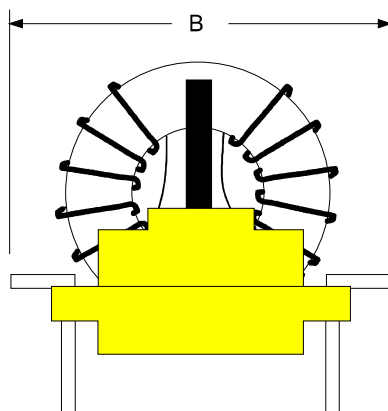
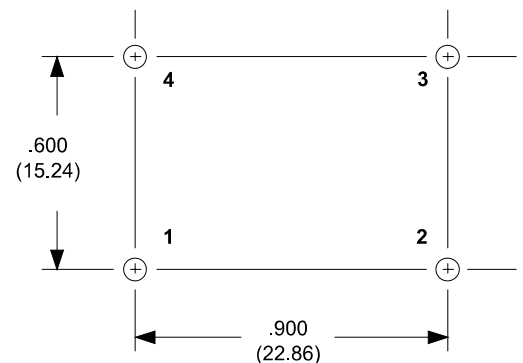
Schematic



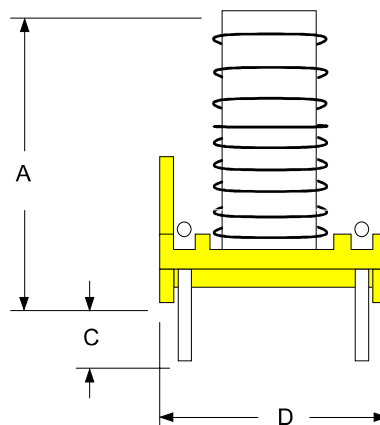
Footprint "A"



Footprint "B"



Lead Dia. .050 "



Size Code	Dimensions in Inches (mm)			
	A	B	C	D
A	1.23 (31.2)	1.25 (31.8)	.200 (5.08)	.625 (15.88)
B	1.40 (35.6)	1.40 (35.6)	.200 (5.08)	.900 (22.86)

HIGH FREQUENCY COMMON MODE CHOKES

RoHS Compliant Available
Add "R" Suffix

Low Cost Encapsulated Package

Toroidal Construction

Isolation 1500 V_{RMS} Minimum

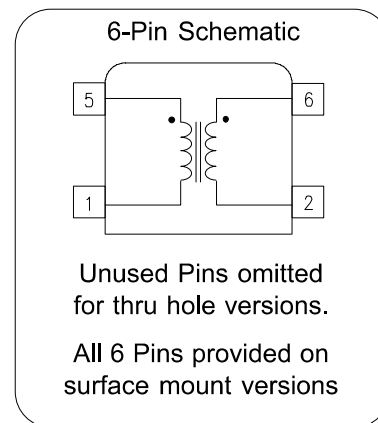
Materials used in the construction of these parts
are UL 94 VO and are rated at 130° C or better

Surface Mount parts available in Tape & Reel

Electrical Specifications⁽¹⁾ at 25°C

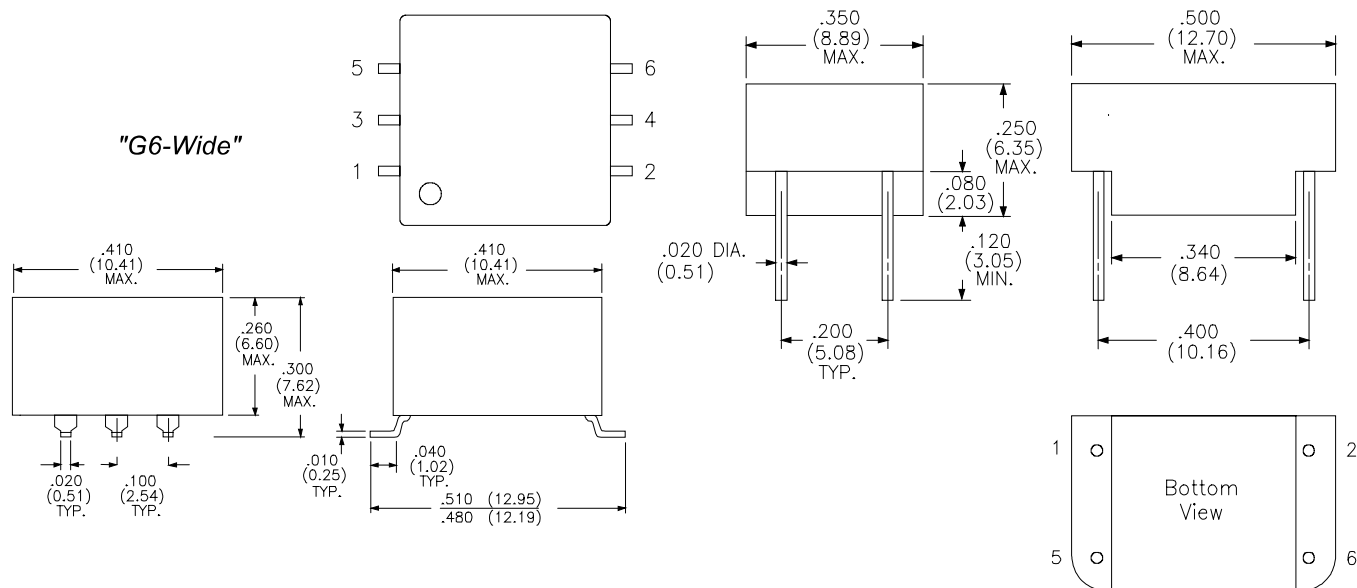
Thru Hole P/N	Surface Mount P/N	L ⁽²⁾ Min. (μH)	DCR Max. (Ω)	L _L Max. (μH)	C _{w/w} Max. (pF)	SRF Typ. (MHz)
L-45001	L-45051	10000	1.6	40	11	0.98
L-45002	L-45052	7000	1.4	35	10	1.25
L-45003	L-45053	5000	1.2	30	9	1.80
L-45004	L-45054	2500	1.0	25	8	2.70
L-45005	L-45055	1500	0.9	12	8	4.10
L-45006	L-45056	1000	0.8	11	7	5.20
L-45007	L-45057	750	0.7	10	6	6.60
L-45008	L-45058	500	0.6	9	5	7.70
L-45009	L-45059	250	0.8	10	6	>13
L-45010	L-45060	100	0.7	8	5	>13
L-45011	L-45061	500	0.6	6	4	>13
L-45012	L-45062	25	0.5	4	3	>13

1. I_{MAX} is 32 mA for all parts @ 500 cm/A
2. Tested @ 10KHz & 100mV



Package Physical Dimensions in Inches (mm)

"T6" - Unused Pins Removed



M21

HIGH FREQUENCY COMMON MODE CHOKES

RoHS Compliant Available
Add "R" Suffix

Low Cost Encapsulated Package

Toroidal Construction

Isolation 1500 V_{RMS} Minimum

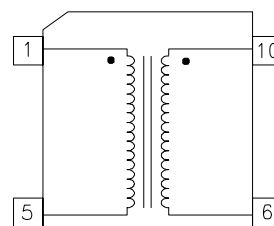
Materials used in the construction of these parts
are UL 94 VO and are rated at 130° C or better

Surface Mount parts available in Tape & Reel

Electrical Specifications⁽¹⁾ at 25°C

Thru Hole P/N	Surface Mount P/N	L ⁽²⁾ Min. (μ H)	DCR Max. (Ω)	L _L Max. (μ H)	C _{w/w} Max. (pF)	SRF Typ. (MHz)
L-45013	L-45063	20000	2.5	100	30	0.4
L-45014	L-45064	15000	2.2	75	25	0.5
L-45015	L-45065	10000	2.0	65	20	0.7
L-45016	L-45066	5000	1.5	50	15	1.2
L-45017	L-45067	2500	1.3	40	13	2.0
L-45018	L-45068	1500	1.0	35	11	2.7
L-45019	L-45069	1000	0.8	30	8	3.2
L-45020	L-45070	750	0.6	25	5	3.5
L-45021	L-45071	500	1.0	35	12	3.8
L-45022	L-45072	250	0.8	25	8	6.1
L-45023	L-45073	100	0.6	20	6	9.8
L-45024	L-45074	50	0.4	10	4	>13

10-Pin Schematic



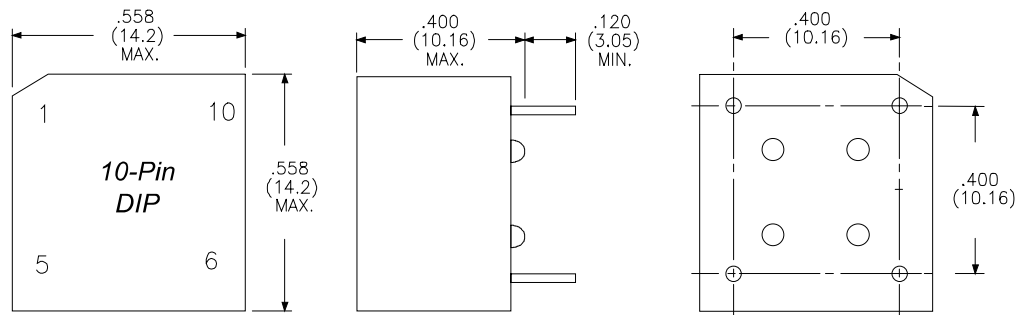
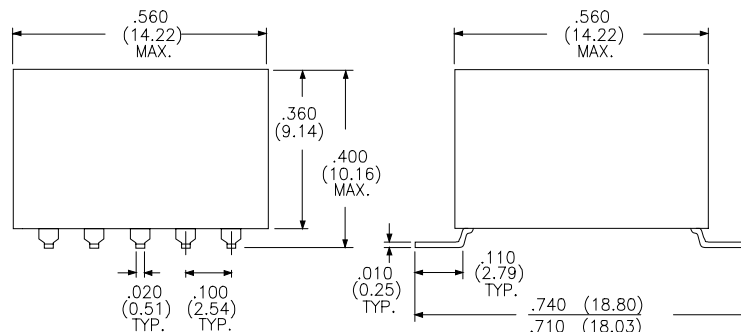
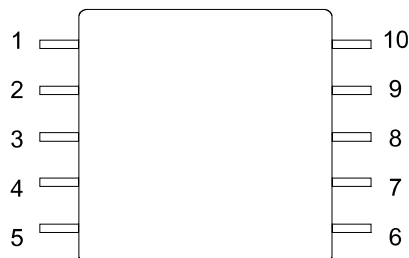
Unused Pins omitted
for thru hole versions.

All 10 Pins provided on
surface mount versions

1. I_{MAX} is 32 mA for all parts @ 500 cm/A

2. Tested @ 10KHz & 100mV

10 Pin
Surface Mount
Package



Self-Leaded Surface Mount Inductors

Low Profile, Self-Leaded Design

Base material meets UL 94VO rating

IR & Vapor Reflow Compatible

Designed for low profile applications
such as Lap Top and Notebook Computers.

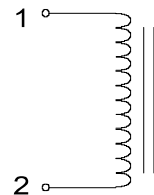
*Lead Free RoHS
Compliant
Available
Add "LF" Suffix*

Electrical Specifications at 25°C

Part Number	L + 20% No DC (μ H)	L ⁽¹⁾ With DC (μ H)	I _{DC} (A)	ET ⁽¹⁾ Product (V- μ S)	DCR max. (m Ω)	Size Code
L-15300	7.0	6.2	1.40	1.33	70.0	SL-1
L-15301	22.7	17.6	1.00	2.40	125.0	SL-1
L-15302	35.3	29.7	1.40	4.60	165.0	SL-2
L-15303	73.0	58.1	1.30	7.83	290.0	SL-3
L-15304	167.0	114.0	0.94	10.00	380.0	SL-2
L-15305	292.0	192.0	0.90	15.70	560.0	SL-3
L-15306	672.0	383.0	0.72	23.50	862.0	SL-3
L-15307	1134.0	645.0	0.74	36.50	1250.0	SL-4
L-15308	1950.0	1070.0	0.71	54.40	1700.0	SL-5
L-15309	1.1	1.0	3.40	0.53	11.0	SL-1
L-15310	12.3	9.4	2.80	2.70	43.4	SL-2
L-15311	21.9	16.2	2.70	4.29	63.0	SL-3
L-15312	40.5	29.1	2.70	6.90	85.0	SL-4
L-15313	72.9	50.0	2.60	10.50	133.0	SL-5
L-15314	5.2	3.8	4.80	1.76	17.3	SL-2
L-15315	7.5	5.1	5.40	2.51	17.7	SL-3
L-15316	14.0	9.0	5.50	4.06	22.3	SL-4
L-15317	25.9	16.1	5.10	6.27	32.0	SL-5
L-15318	3.8	2.5	8.00	1.77	8.3	SL-3
L-15319	7.9	4.9	7.80	3.04	12.4	SL-4
L-15320	16.0	9.3	7.20	4.92	18.7	SL-5

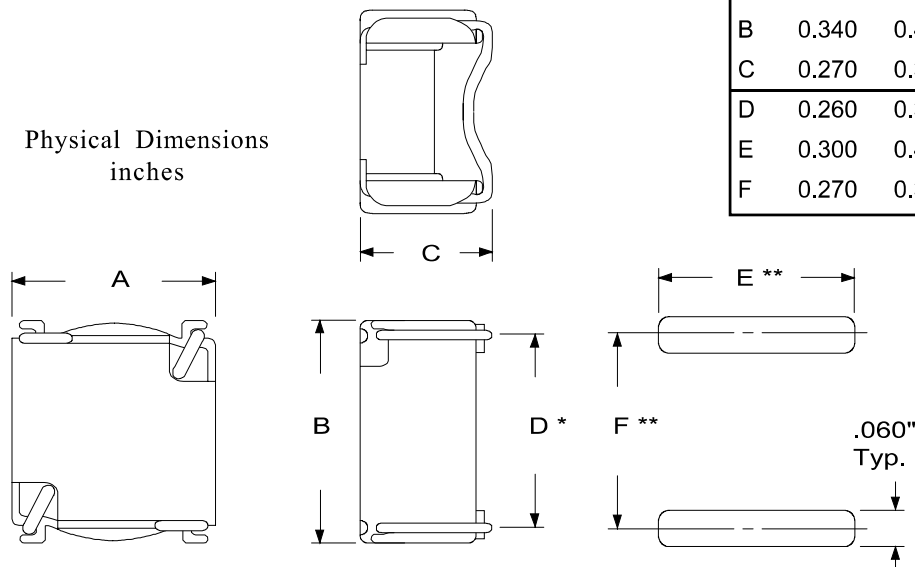
*Tape & Reel
Available*

Schematic



1) Typical values for a 55°C Temperature rise. At 500 kHz and E-T value above, the core loss is 10 % of copper loss.

Physical Dimensions
inches



	SL-1	SL-2	SL-3	SL-4	SL-5
A	0.340	0.435	0.560	0.590	0.670
B	0.340	0.440	0.565	0.615	0.700
C	0.270	0.360	0.360	0.390	0.390
D	0.260	0.350	0.450	0.500	0.580
E	0.300	0.400	0.520	0.550	0.620
F	0.270	0.360	0.460	0.510	0.590

* Tolerance
is $\pm .015$ (0.38)

** Tolerance
is $\pm .005$ (0.15)

Surface Mount Inductors

Toroid Mount meets UL94VO

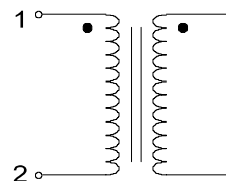
Designed for IR & Vapor
Phase Reflow Processes

Custom Designs Available

For use as a dual inductor, single inductor, or transformer. Connect in series for high inductance values or wired in parallel for less inductance, but twice the current capacity. As a 1:1 transformer, they can provide a minimum of 500 volts isolation with good frequency response.

These parts are manufactured using Sendust material. Lower cost versions of these products are available using powdered iron, however, there is an increase in core loss.

Schematic



Series Operation:
Connect 2 & 4

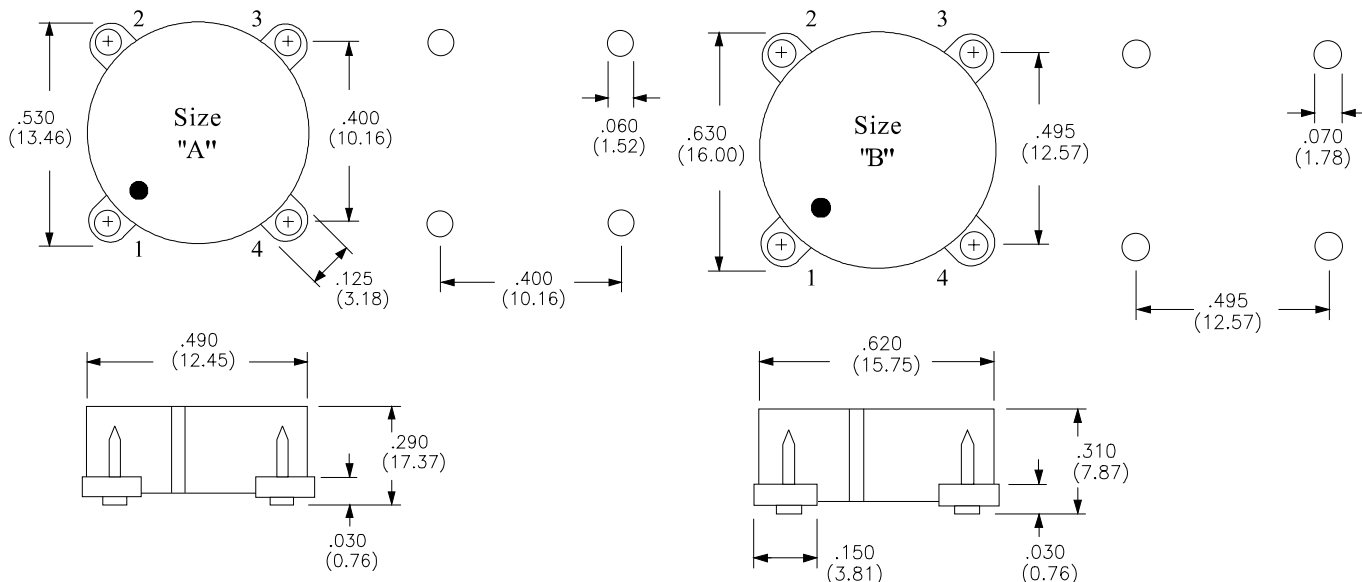
Parallel Operation:
Connect 1 & 4, 2 & 3

Electrical Specifications at 25°C

Part Number	--- Parallel Ratings ---			--- Series Ratings ---			Energy Typ. (μJ)	Size Code
	L ± 30% (μH)	DCR Max. (mΩ)	I Max. ADC	L ± 30% (μH)	DCR Max. (mΩ)	I Max. ADC		
L-15100	10	38	2.00	40	76	1.00	14	A
L-15101	20	175	1.15	80	350	0.58	13	A
L-15102	50	300	0.73	200	600	0.37	13	A
L-15103	100	375	0.51	400	750	0.26	13	A
L-15104	200	700	0.36	800	1400	0.18	13	A
L-15105	10	40	2.50	40	80	1.25	26	A
L-15106	20	103	1.60	80	206	0.80	26	A
L-15107	50	180	1.02	200	360	0.51	26	A
L-15108	82	320	0.73	328	640	0.37	26	A
L-15109	100	375	0.73	400	750	0.37	26	A
L-15110	300	625	0.42	1200	1250	0.21	26	A
L-15111	10	38	3.00	40	76	1.50	32	B
L-15112	20	100	1.50	80	200	0.75	23	B
L-15113	50	350	0.95	200	700	0.48	23	B
L-15114	100	375	0.67	400	750	0.34	23	B
L-15115	300	720	0.39	1200	1440	0.20	23	B
L-15116	10	29	4.00	40	58	2.00	55	B
L-15117	20	50	2.10	80	100	1.05	45	B
L-15118	50	90	1.35	200	180	0.68	45	B
L-15119	100	175	0.95	400	350	0.48	45	B

Physical Dimensions in inches (mm)

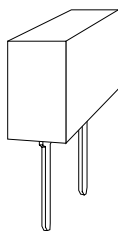
Footprints of Contact Surface Area, Not PCB Layout



RoHS Compliant Available
Add "R" Suffix

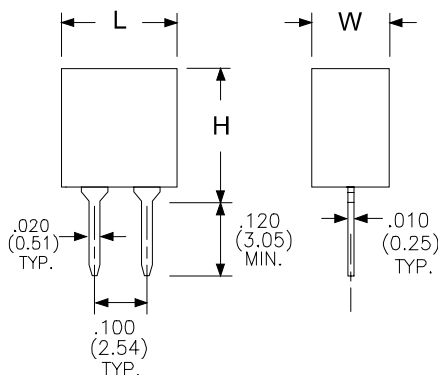
Small Toroid RF Chokes

Miniature Two Lead Thru-hole Packages
Excellent Electrical Performance - High Q



Dimensions in inches (mm)

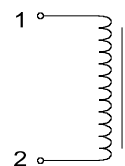
Code	L	W	H
MT1	0.210 (5.33)	0.110 (2.79)	0.230 (5.84)
MT2	0.270 (6.86)	0.150 (3.81)	0.280 (7.11)
MT3	0.385 (9.78)	0.195 (4.95)	0.395 (10.03)



Part Number	L μH $\pm 20\%$	Q Min.	DCR Ω Max.	IDC mA Max.	Pkg. Code
L-11714	0.15	80	0.06	1800	MT1
L-11715	0.18	80	0.07	1600	MT1
L-11716	0.22	80	0.08	1500	MT1
L-11717	0.27	80	0.10	1400	MT1
L-11718	0.33	80	0.12	1300	MT1
L-11719	0.39	80	0.15	1150	MT1
L-11720	0.47	80	0.20	1000	MT1
L-11721	0.56	70	0.25	900	MT1
L-11722	0.68	70	0.30	800	MT1
L-11723	0.82	70	0.35	750	MT1
L-11724	1.00	70	0.40	700	MT1
L-11727	0.15	60	0.06	1800	MT1
L-11728	0.18	60	0.07	1600	MT1
L-11729	0.22	65	0.08	1500	MT1
L-11730	0.27	65	0.10	1400	MT1
L-11731	0.33	65	0.11	1300	MT1
L-11732	0.39	65	0.14	1200	MT1
L-11733	0.47	65	0.17	1100	MT1
L-11734	0.56	70	0.22	1000	MT1
L-11735	0.68	70	0.27	900	MT1
L-11736	0.82	70	0.30	800	MT1
L-11737	1.00	70	0.35	750	MT1
L-11738	1.20	60	0.40	700	MT1
L-11739	1.50	60	0.50	630	MT1
L-11740	1.80	60	0.70	530	MT1
L-11741	2.20	60	0.90	470	MT1
L-11742	2.70	60	1.10	420	MT1
L-11743	3.30	60	1.30	390	MT1
L-11744	3.90	60	1.50	360	MT1
L-11745	4.70	60	1.80	330	MT1
L-11746	5.60	60	2.00	310	MT1
L-11747	6.80	60	2.20	300	MT1
L-11748	8.20	60	2.40	290	MT1
L-11749	10.0	60	2.60	280	MT1

Applications Include
Satellite Communications
Microwave Equipment
Broadcast TV
Cable TV Systems
Test Equipment
AM/FM Radio
Receivers/Transmitters
Scanners

Schematic



Part Number	L μH $\pm 20\%$	Q Min.	DCR Ω Max.	IDC mA Max.	Pkg. Code
L-11750	10	75	1.1	550	MT2
L-11751	12	75	1.3	500	MT2
L-11752	15	75	1.5	450	MT2
L-11753	18	80	1.9	410	MT2
L-11754	22	80	2.3	380	MT2
L-11755	27	80	2.7	350	MT2
L-11756	33	80	3.3	320	MT2
L-11757	39	80	3.9	290	MT2
L-11758	47	80	4.7	260	MT2
L-11759	56	80	5.6	240	MT2
L-11760	68	80	6.8	220	MT2
L-11761	82	80	8.1	200	MT2
L-11762	100	80	9.7	180	MT2
L-11763	120	45	12	160	MT2
L-11764	150	45	14	150	MT2
L-11765	180	45	17	140	MT2
L-11766	220	50	20	130	MT2
L-11767	270	55	24	120	MT2
L-11768	330	55	19	130	MT2
L-11769	390	55	22	120	MT2

Part Number	L μH $\pm 20\%$	Q Min.	DCR Ω Max.	IDC mA Max.	Pkg. Code
L-11775	100	75	6	280	MT3
L-11776	120	75	7	260	MT3
L-11777	150	75	8	240	MT3
L-11778	180	75	10	220	MT3
L-11779	220	80	12	200	MT3
L-11780	270	80	14	180	MT3
L-11781	330	80	17	160	MT3
L-11782	390	80	20	150	MT3
L-11783	470	75	24	140	MT3
L-11784	560	75	28	130	MT3
L-11785	680	75	33	120	MT3
L-11786	820	75	39	110	MT3
L-11787	1000	75	45	100	MT3
L-11788	1200	45	31	120	MT3
L-11789	1500	45	37	110	MT3
L-11790	1800	50	44	100	MT3
L-11791	2200	50	52	90	MT3
L-11792	2700	50	61	85	MT3
L-11793	3300	50	71	80	MT3
L-11794	3900	50	82	75	MT3

RoHS Compliant Available
Add "R" Suffix

Electrical Specifications at 25°C

Part Number	L ± 30% (mH)	DCR Max. (Ω)	I Sat. (mA)	I Max. (mA)	Size Code
L-31200	0.10	0.17	48.0	880	A
L-31201	0.15	0.21	39.0	790	A
L-31202	0.22	0.25	33.0	720	A
L-31203	0.33	0.30	27.0	650	A
L-31204	0.47	0.36	22.0	600	A
L-31205	0.68	0.44	19.0	540	A
L-31206	1.00	0.53	15.0	490	A
L-31207	1.50	0.65	12.0	450	A
L-31208	2.20	0.79	10.0	400	A
L-31209	3.30	1.55	8.0	290	A
L-31210	4.70	1.85	7.0	260	A
L-31211	6.80	4.36	6.0	170	A
L-31212	10.00	5.29	5.0	160	A
L-31213	15.00	6.48	4.0	140	A
L-31214	22.00	13.10	3.0	100	A
L-31215	33.00	16.00	3.0	90	A
L-31216	47.00	19.10	2.0	80	A
L-31217	0.15	0.20	75.0	790	B
L-31218	0.22	0.24	62.0	720	B
L-31219	0.33	0.29	50	650	B
L-31220	0.47	0.35	42	590	B
L-31221	0.68	0.42	35	540	B
L-31222	1.00	0.51	29	490	B
L-31223	1.50	0.63	24	440	B
L-31224	2.20	0.76	20	400	B
L-31225	3.30	1.00	18	350	B
L-31226	4.70	2.24	13	240	B
L-31227	6.80	2.70	11	210	B
L-31228	10.00	3.27	9	190	B
L-31229	15.00	6.26	8	140	B
L-31230	22.00	7.58	6	130	B
L-31231	33.00	9.50	5	110	B
L-31232	47.00	18.50	4	80	B
L-31233	68.00	24.10	3	70	B
L-31234	0.22	0.28	100	900	C
L-31235	0.33	0.34	82	810	C
L-31236	0.47	0.40	69	740	C
L-31237	0.68	0.48	57	670	C
L-31238	1.00	0.59	47	610	C
L-31239	1.50	0.72	39	550	C
L-31240	2.20	0.87	32	500	C
L-31241	3.30	1.07	26	450	C
L-31242	4.70	1.27	22	410	C
L-31243	6.80	1.53	18	380	C
L-31244	10.00	1.86	15	340	C
L-31245	15.00	2.27	12	310	C
L-31246	22.00	8.67	10	160	C
L-31247	33.00	10.6	8	140	C
L-31248	47.00	12.7	7	130	C
L-31249	68.00	15.2	6	120	C
L-31250	100.00	18.5	5	110	C
L-31251	150.00	37.7	4	80	C
L-31252	220.00	45.6	3.2	70	C
L-31253	330.00	53.7	2.6	60	C

ER Style Surface Mount Inductors

These products should be considered in any situation which calls for low profile surface mount inductors. Applications include notebook computers, pagers, GPS etc.

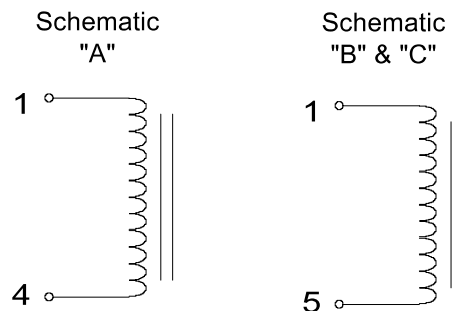
Compatible with Pick & Place and reflow solder systems

500 VRMS Isolation

Designed for Filtering, Impedance Matching and Line Coupling Applications

Ungapped Ferrite Power Material (Gapped Versions Available)

Packages on this page are also available in Transformer design configurations.

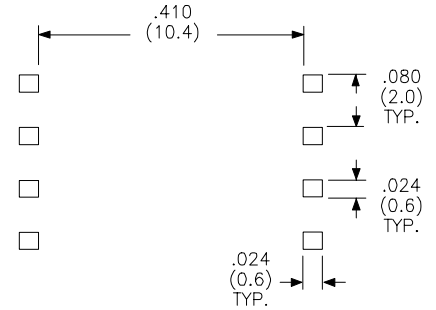
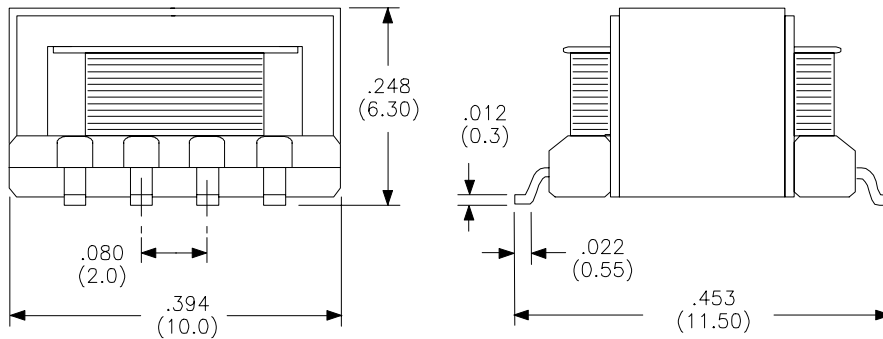


ER Style SMD Package Dimensions in inches (mm)

ER Surface Mount 8-Pin Size Code "A"

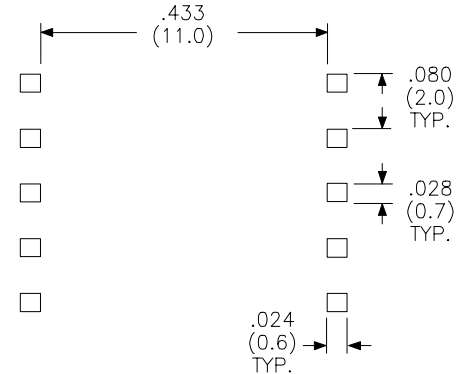
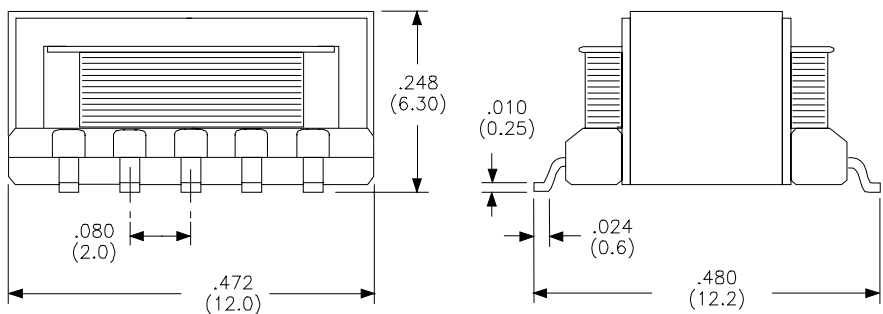
*Tape & Reel
Available*

Footprint of Contact
Surface Area,
Not PCB Pad Layout.



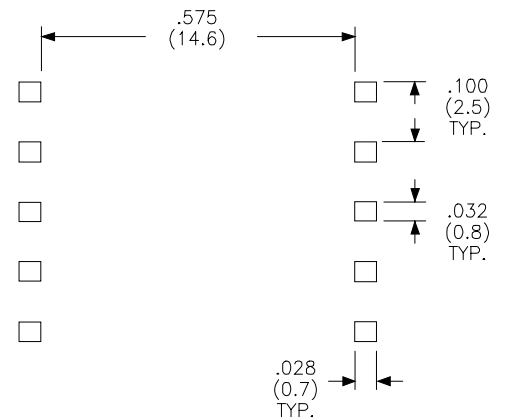
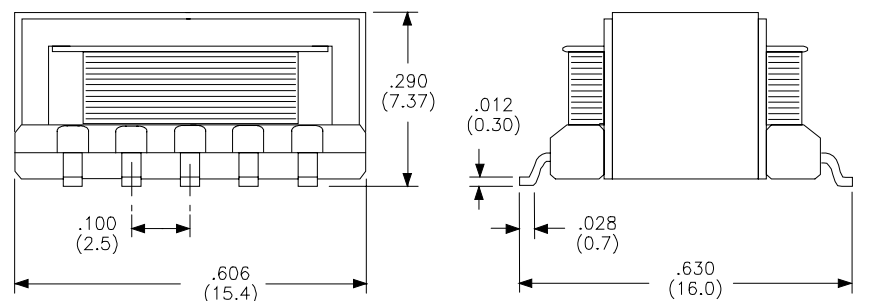
ER Surface Mount 10-Pin Size Code "B"

Footprint of Contact
Surface Area,
Not PCB Pad Layout.



ER Surface Mount 10-Pin Size Code "C"

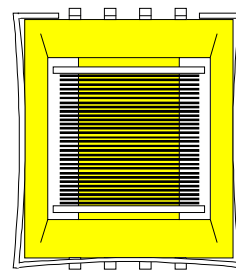
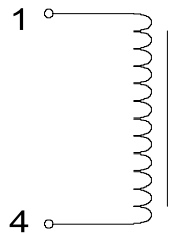
Footprint of Contact
Surface Area,
Not PCB Pad Layout.



EE Style Low Profile Surface Mount Inductors

These products should be considered in any situation which calls for low profile surface mount inductors. Applications include notebook computers, pagers, GPS etc.

Schematic
"D"



Electrical Specifications at 25°C

Part Number	L ± 30% (mH)	DCR Max. (Ω)	I Sat. (mA)	I Max. (mA)	Size Code
L-31101	0.150	0.28	96.0	840	D
L-31102	0.220	0.34	79.0	760	D
L-31103	0.330	0.41	65.0	690	D
L-31104	0.470	0.49	54.0	630	D
L-31105	0.680	0.59	45.0	570	D
L-31106	1.000	0.72	37.0	520	D
L-31107	1.500	0.88	30.0	470	D
L-31108	2.200	1.07	25.0	430	D
L-31109	3.300	1.31	20.0	390	D
L-31110	4.700	1.56	17.0	350	D
L-31111	6.800	1.88	14.0	320	D
L-31112	10.000	7.17	12.0	160	D
L-31113	15.000	8.78	10.0	150	D
L-31114	22.000	10.60	8.0	140	D
L-31115	33.000	13.00	6.5	120	D
L-31116	47.000	15.50	5.4	110	D
L-31117	68.000	18.70	4.5	100	D
L-31118	100.000	37.70	3.7	70	D
L-31119	150.000	46.20	3.0	60	D

Lead Free RoHS Compliant
Available Add "LF" Suffix

Compatible with Pick & Place
and reflow solder systems

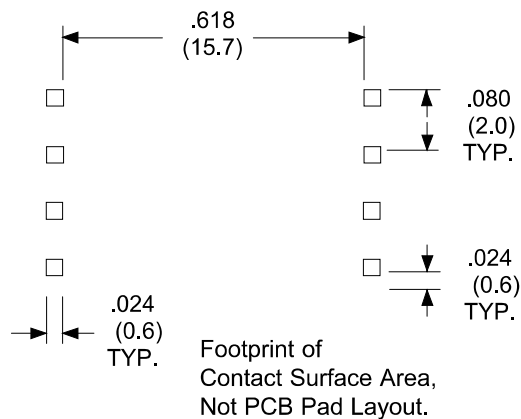
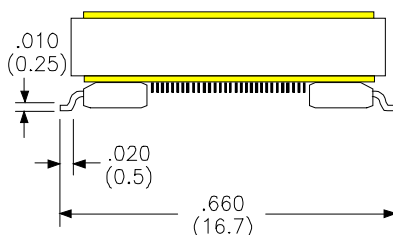
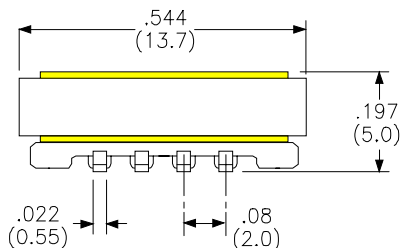
500 VRMS Isolation

Designed for Filtering,
Impedance Matching and Line
Coupling Applications

Ungapped Ferrite Power Material
(Gapped Versions Available)

Packages on this page are also
available in Transformer
design configurations.

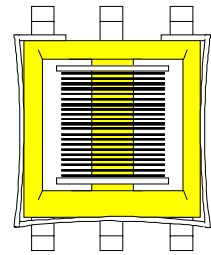
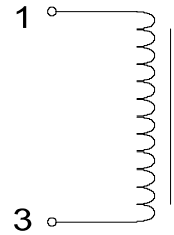
8 Pin Low Profile EE Surface Mount Size Code "D"



EE Style Low Profile Surface Mount Inductors

These products should be considered in any situation which calls for low profile surface mount inductors. Applications include notebook computers, pagers, GPS etc.

Schematic
"E"



Electrical Specifications at 25°C

Part Number	L ± 30% (mH)	DCR Max. (Ω)	I Sat. (mA)	I Max. (mA)	Size Code
L-31150	0.010	0.06	109	1010	E
L-31151	0.015	0.08	89	910	E
L-31152	0.022	0.09	74	830	E
L-31153	0.033	0.11	60	750	E
L-31154	0.047	0.14	50	690	E
L-31155	0.068	0.16	42	630	E
L-31156	0.100	0.20	38	570	E
L-31157	0.150	0.76	28	290	E
L-31158	0.220	0.92	23	260	E
L-31159	0.330	1.13	19	240	E
L-31160	0.470	1.35	16	220	E
L-31161	0.680	1.62	13	200	E
L-31162	1.000	1.97	11	180	E
L-31163	1.500	2.41	9	160	E
L-31164	2.200	3.00	7	150	E
L-31165	3.300	5.96	6	100	E
L-31166	3.900	7.00	5	100	E

Compatible with Pick & Place
and reflow solder systems

500 VRMS Isolation

Designed for Filtering,
Impedance Matching and Line
Coupling Applications

Ungapped Ferrite Power Material
(Gapped Versions Available)

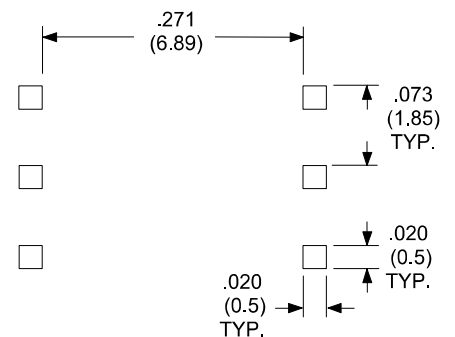
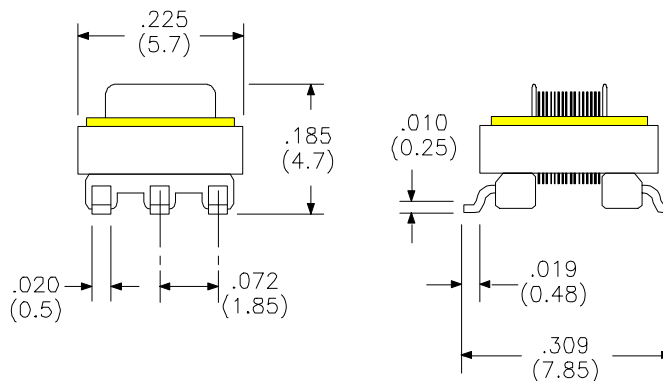
Packages on this page are also
available in Transformer
design configurations.

*Tape & Reel
Available*

*Lead Free RoHS Compliant
Available Add "LF" Suffix*

6 Pin Low Profile EE Surface Mount

Size
Code
"E"



Radial Lead Mini Inductors

HIGH INDUCTANCE - LOW CURRENT

Designed for Noise, Spike & Filtering applications.

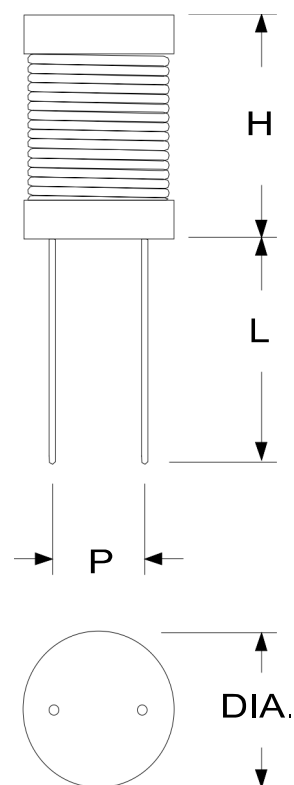
*Lead Free RoHS
Compliant Available
Add "LF" Suffix*

Electrical Specifications at 25°C

Part Number	L ⁽¹⁾ ± 10% (μ H)	DCR Nom. (m Ω)	I ⁽²⁾ Max. (A)	Size Code
L-61600	10	60	1.80	A
L-61601	15	70	1.50	A
L-61602	22	90	1.20	A
L-61603	33	100	1.00	A
L-61604	47	170	0.90	A
L-61605	68	250	0.85	A
L-61606	100	300	0.75	A
L-61607	150	400	0.60	A
L-61608	220	600	0.50	A
L-61609	330	1200	0.40	A
L-61610	470	1100	0.35	A
L-61611	680	1900	0.30	A
L-61612	1000	2900	0.20	A
L-61613	3.3	40	2.0	A
L-61700	22	40	1.80	B
L-61701	33	60	1.50	B
L-61702	47	100	1.20	B
L-61703	68	110	1.00	B
L-61704	100	150	0.80	B
L-61705	150	240	0.65	B
L-61706	220	390	0.55	B
L-61707	330	600	0.45	B
L-61708	470	700	0.38	B
L-61709	680	1000	0.31	B
L-61710	1000	1600	0.25	B
L-61711	1500	2600	0.20	B
L-61712	2200	3600	0.17	B
L-61800	47	50	1.90	C
L-61801	68	70	1.60	C
L-61802	100	100	1.30	C
L-61803	150	150	1.00	C
L-61804	220	200	0.88	C
L-61805	330	300	0.70	C
L-61806	470	400	0.60	C
L-61807	680	700	0.50	C
L-61808	1000	1000	0.40	C
L-61809	1500	1600	0.33	C
L-61810	2200	2600	0.27	C
L-61811	3300	4100	0.22	C
L-61812	4700	5800	0.19	C

Coils finished with UL rated varnish.

Variations on electrical parameters of parts listed are available - Please contact factory.



Height dimensions are without solder joint or coatings

LEADS ARE #22 AWG

Size Code	Reference Dimensions in Inches (mm)			
	H	DIA.	P	L
A	.32 (8.2)	.24 (6.1)	.13 (3.3)	.79 (20.0)
B	.40 (10.2)	.32 (8.2)	.19 (4.8)	.79 (20.0)
C	.48 (12.2)	.40 (10.2)	.25 (6.4)	.79 (20.0)

1. Tested at 1 kHz & 100 mV
2. DC Current which produces a 10% drop in Inductance.

Radial Lead Mini Inductors

HIGH INDUCTANCE - LOW CURRENT

Designed for Noise, Spike & Filtering applications.

Coils finished with UL rated varnish.

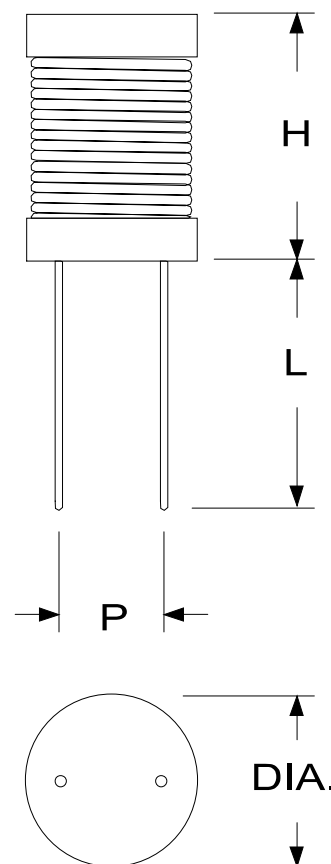
Variations on electrical parameters of parts listed are available - Please contact factory.

Electrical Specifications at 25°C

Part Number	L ⁽¹⁾ ± 10% (μ H)	DCR Nom. (m Ω)	I ⁽²⁾ Max. (A)	Size Code
L-61100	10	60	1.80	A
L-61101	15	70	1.50	A
L-61102	22	90	1.20	A
L-61103	33	100	1.00	A
L-61104	47	170	0.90	A
L-61105	68	250	0.85	A
L-61106	100	300	0.75	A
L-61107	150	400	0.60	A
L-61108	220	600	0.50	A
L-61109	330	1200	0.40	A
L-61110	470	1100	0.35	A
L-61111	680	1900	0.30	A
L-61112	1000	2900	0.20	A
L-61113	3.3	40	2.0	A
L-61200	22	40	1.80	B
L-61201	33	60	1.50	B
L-61202	47	100	1.20	B
L-61203	68	110	1.00	B
L-61204	100	150	0.80	B
L-61205	150	240	0.65	B
L-61206	220	390	0.55	B
L-61207	330	600	0.45	B
L-61208	470	700	0.38	B
L-61209	680	1000	0.31	B
L-61210	1000	1600	0.25	B
L-61211	1500	2600	0.20	B
L-61212	2200	3600	0.17	B
L-61300	47	50	1.90	C
L-61301	68	70	1.60	C
L-61302	100	100	1.30	C
L-61303	150	150	1.00	C
L-61304	220	200	0.88	C
L-61305	330	300	0.70	C
L-61306	470	400	0.60	C
L-61307	680	700	0.50	C
L-61308	1000	1000	0.40	C
L-61309	1500	1600	0.33	C
L-61310	2200	2600	0.27	C
L-61311	3300	4100	0.22	C
L-61312	4700	5800	0.19	C

1. Tested at 1 kHz & 100 mV

2. DC Current which produces a 10% drop in Inductance.



Height dimensions are without solder joint or coatings

LEADS ARE #22 AWG

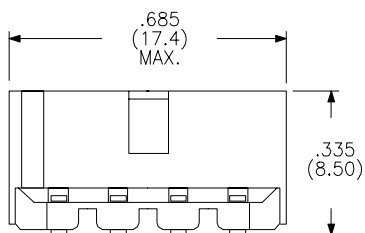
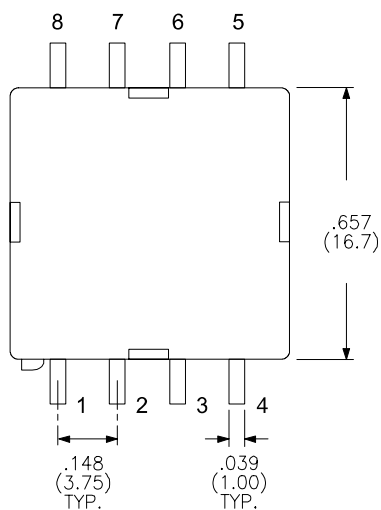
Size Code	Reference Dimensions in Inches (mm)			
	H	DIA.	P	L
A	.32 (8.2)	.24 (6.1)	.13 (3.3)	.66 (17.0)
B	.40 (10.2)	.32 (8.2)	.19 (4.8)	.66 (17.0)
C	.48 (12.2)	.40 (10.2)	.25 (6.4)	.66 (17.0)

*Lead Free RoHS Compliant
Available Add "LF" Suffix*

Low Profile High Current Common Mode Choke with Pick-&-Place Cap

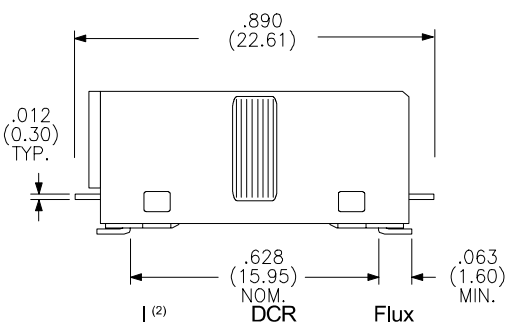
Choke Part Number	L Min. (μ H)	DCR Nom. (m Ω)	I ⁽¹⁾ Max. (A)	SRF (MHz)
L-37200	10	2	3.0	11.3
L-37201	20	8	2.0	8.3
L-37202	50	22	1.6	6.3
L-37203	100	53	0.8	4.3

1. Parallel Connection

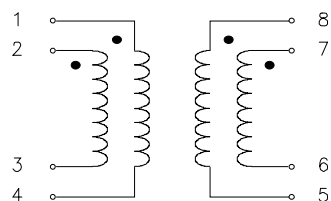


Lead Free RoHS Compliant
Available Add "LF" Suffix

EFD 15
Surface Mount
Package with
Pick & Place Cap

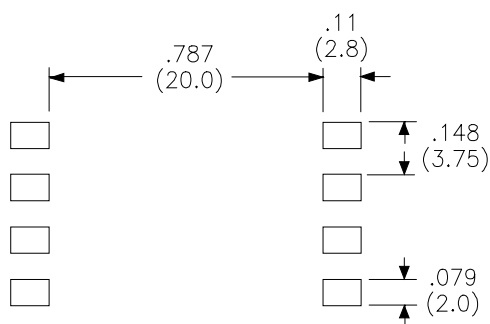
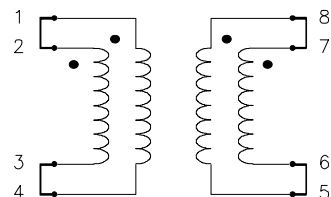


Schematic



In-Circuit
Connections:

Short Pins
1-2, 3-4,
5-6 & 7-8

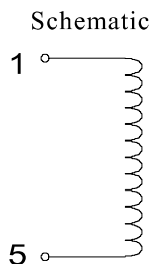


Suggested Pad Layout

Tape & Reel
Available

Surface Mount Inductors Low Profile

EFD Style with
Pick-&-Place Cap
Powdered Iron Versions
Available - Contact Factory



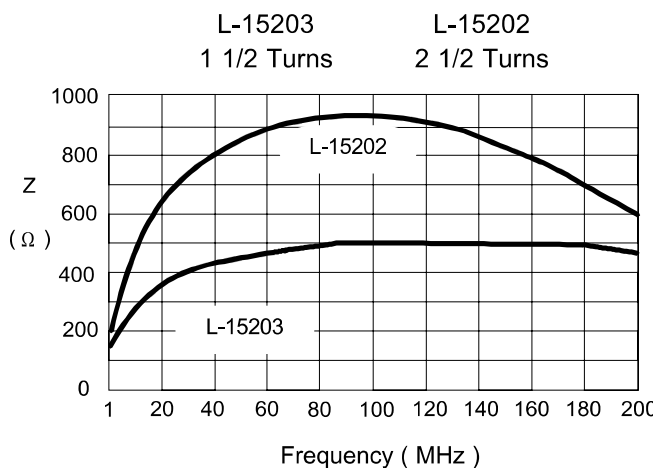
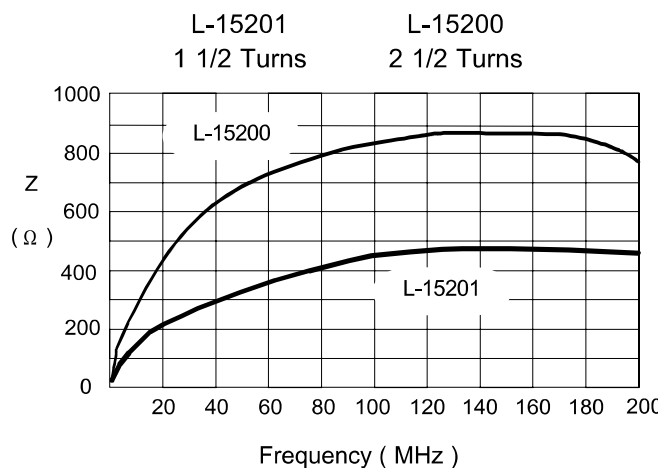
Part Number	Induct. (mH)	I ⁽²⁾ (Amps)	DCR (Ω)	E-T (V- μ S)
L-37101	19.6	80	18.0	444
L-37102	14.3	125	11.0	387
L-37103	10.0	199	6.0	332
L-37104	6.5	252	4.5	277
L-37105	4.2	320	3.2	222
L-37106	2.3	500	1.6	166
L-37107	0.9	795	0.8	111

2. Rated for a 25°C Temperature Rise

M21

Bead Inductors

Designed for use in attenuating EMI and other unwanted High Frequency Noise without contributing to Power Loss.



Impedance graphs are for typical response over frequency
Electrical variations of the above part numbers are available.
Lead Wire is #24 AWG tinned copper -- Mounting available.

Nominal Package Dimensions

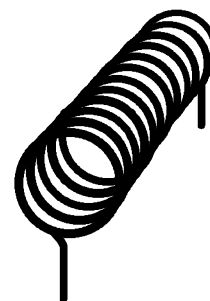
Outside Diameter	Body Length	Lead Length
.236"	.394"	.394"

Air Coils & Bobbins

Rhombus manufactures air coils and Bobbins for a variety of applications. Please fax us your requirements for an immediate quote.

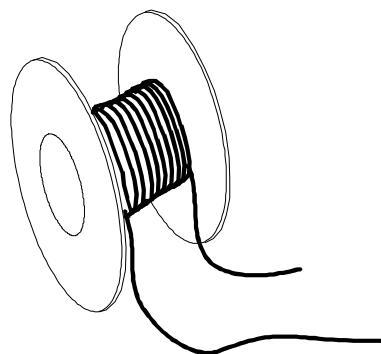
Applications Include

Satellite Communications • Microwave Equipment
Broadcast TV • Test Equipment • AM/FM Radio
Receivers/Transmitters • Scanners • Cable TV Systems



Mechanical

Clockwise & Counter Clockwise windings.
Inside Coil Diameters .100" to .500"
Temperature Range 130° to 220° C
Wire gauges #12 to #32 AWG
Variable pitch available
Coil lengths up to 2.0"

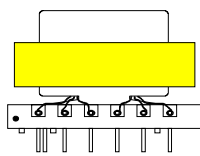


Custom Switch Mode Magnetics

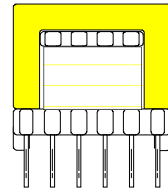
For main power, drive, auxiliary transformers and switch mode inductors, Rhombus Industries has been a dependable, cost effective supplier of switch mode magnetics to the power supply market. If you are currently producing your own Magnetic Components for your end product, please consider Rhombus Industries as a source for quality workmanship at competitive rates. Utilizing our process will offer direct savings on raw materials, labor and capital equipment, as well as, benefits from reduced overhead for inventory, scheduling, and equipment maintenance.

Our custom output power inductors are built using Powdered Iron, MPP or Sendust materials. As required, several mount types are available.

We can provide you with a custom built transformer wound on any standard bobbin utilizing ferrite geometries, including, but not limited to, the following:



EE	EI	EFD	EP	EPC	ER
ETD	PQ	RM	UU	UI	
	Pot Cores		Toroids		



Please fax your requirements and we will promptly provide you with a quote.

Core Winding Services

Rhombus Industries offers Hand Winding to address our Customer's unique Magnetic needs. Utilizing the most cost-effective techniques and competitive labor rates, we are able to wind small toroids (up to 6 mm outside diameter) at significantly reduced costs compared to U.S. production.

Avoid the hassle of dealing with offshore suppliers, while still enjoying offshore pricing. Please fax your requirements and we will promptly provide you with a quote.

Mechanical Criteria:

Wire gauges from #32 to #42 AWG.

Toroids up to 6 mm outside diameter

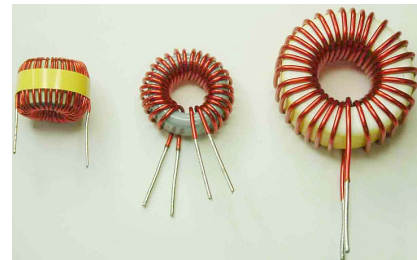
Materials:

Including Ferrite, Powdered Iron, MPP, Sendust.

Various Wire Insulation Characteristics

Material can be procured by Rhombus, or supplied by the customer.

Tinning of leads is available at additional cost.



Magnetic Product Families from Rhombus Industries

Telecommunications

ISDN
T1 / CEPT
HDSL, ADSL

Pulse Transformers

General Purpose
Impedance Matching
Isolation
SCR Trigger

Inductors

Toroidal • Radial Lead
Chokes • Air Coils

Audio Transformers

Modem Couplers
Telephone Coupling
Voiceband Repeat Coils
Voice / Data • Dry / Wet
Hybrids

LAN Products

Ethernet • StarLan
10Base-T • Token Ring

Switched Mode Magnetics

Chokes - Common Mode
& Differential Mode
Output Inductors
Drive Transformers
Current Sense Transformer

Delay Lines

Passive (Electromagnetic)
Active (Logic Buffered)
Tapped / Multi
Programmables
Pulse Control / Oscillators
FAST & Schottky TTL
Low Voltage CMOS
ECL 10K-10KH-100K

RF Filters

10Base-T
Signal Line • High Q

Power Magnetics

50/60 Hz • 400 Hz
Low Profile
Smoothing Chokes
Line Chokes
1 Watt to 1 kW

- *Off-the-Shelf Variety of Schematics & Geometries*
- *Open Case, Epoxy Encapsulated, and Transfer Molded Packages*
- *Thru-hole & SMD Versions*
- *Samples Shipped from Stock or in 1-2 weeks at No Cost for most products*

Catalogs, Datasheets & Application notes for download in PDF format

www.rhombus-ind.com

Services & Capabilities

Standard Product Line

Broad range of Magnetic Products as listed in our various catalogs.

Coil Winding

Toroidal, Bobbin, Air Coil types. Wide range of gauges. Machine and hand wound.

Custom Designs

We welcome designs customized to your specific requirements.

Expedited Turn-around

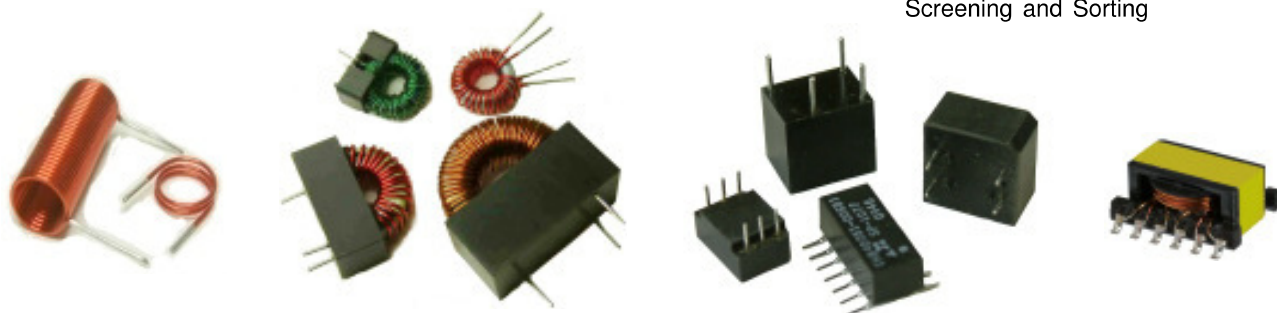
For Critical needs Rhombus can often provide faster than standard lead times.

Cross Referencing

Rhombus can cross reference your current supplier part numbers.

Environmental and Electrical Test Capabilities

Thermal Shock, and Life Test
Humidity / Temperature Testing
Electrical Parameter Characterization
Screening and Sorting



**Rhombus
Industries Inc.**
Transformers & Magnetic Products