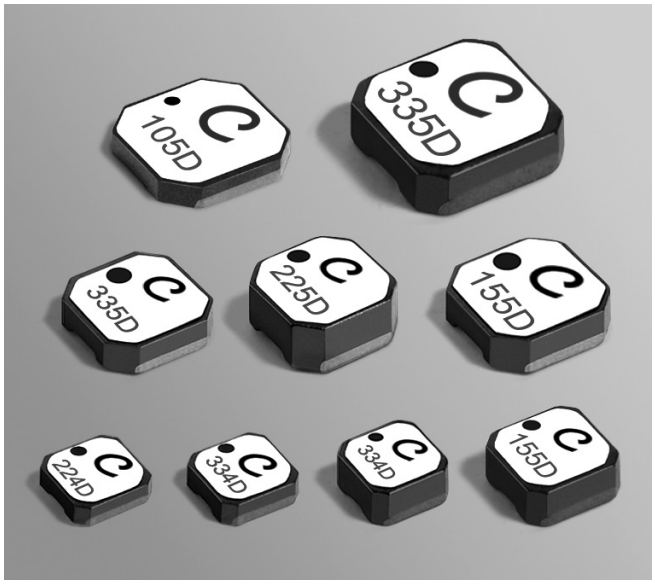
RoHS/ REACH COMPLIANT

Halogen Free

Shielded Power Inductors High Inductance



- High inductance values (220 – 4700 µH) not available in the corresponding LPS series of parts
- Rugged construction improves pick and place operation
- LPZ3010, LPZ3015, LPZ4012 and LPZ4018 are rated AEC-Q200 Grade 3 (–40°C to +85°C)

Core material Ferrite

Core and winding loss See www.coilcraft.com/coreloss

Environmental RoHS compliant, halogen free

Terminations RoHS compliant matte tin over nickel over silver.

Ambient temperature –40°C to +85°C with Irms current

Maximum part temperature +125°C (ambient + temp rise)

Storage temperature Component: –40°C to +125°C. Tape and reel packaging: –40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

Part number[1]	Inductance[2] ±20% (µH)	DCR max[3] (Ohms)	SRF typ[4] (MHz)	Isat (A)[5] 10% drop	20% drop	30% drop	Irms (A)[6] 20°C rise	40°C rise
LPZ3008-224MR_	220	11.5	9.0	0.067	0.073	0.076	0.100	0.145
LPZ3008-334MR_	330	18.0	7.0	0.059	0.064	0.066	0.090	0.130
LPZ3010-334MR_	330	18.5	7.0	0.10	0.105	0.115	0.085	0.11
LPZ3015-334MR_	330	23.0	5.0	0.10	0.11	0.11	0.070	0.095
LPZ3314-105MR_	1000	31.0	3.0	0.090	0.099	0.100	0.082	0.100
LPZ3314-155MR_	1500	44.0	2.7	0.080	0.086	0.090	0.060	0.080
LPZ4012-335MR_	3300	65.0	0.95	0.074	0.078	0.080	0.050	0.065
LPZ4018-155MR_	1500	25.0	2.4	0.095	0.10	0.105	0.080	0.11
LPZ4018-185MR_	1800	31.5	2.3	0.090	0.095	0.10	0.070	0.095
LPZ4018-225MR_	2200	32.5	2.1	0.088	0.094	0.10	0.070	0.090
LPZ4018-335MR_	3300	48.0	1.6	0.082	0.092	0.094	0.055	0.075
LPZ4414-155MR_	1500	26.4	2.2	0.096	0.099	0.10	0.085	0.11
LPZ4414-185MR_	1800	35.0	1.9	0.089	0.094	0.097	0.075	0.10
LPZ4414-225MR_	2200	42.5	1.9	0.082	0.089	0.092	0.065	0.080
LPZ4414-335MR_	3300	56.0	1.3	0.072	0.078	0.083	0.055	0.070
LPZ5010-105MR_	1000	28.0	3.0	0.087	0.096	0.10	0.080	0.11
LPZ5015-335MR_	3300	55.0	1.7	0.064	0.072	0.076	0.055	0.075
LPZ5015-475MR_	4700	80.0	1.4	0.062	0.069	0.072	0.045	0.065

1. When ordering, please specify **termination** and **packaging** codes:

LPZ3008-334MRC

Termination: **R**= RoHS compliant matte tin over nickel over silver. Special order, added cost: **Q** = RoHS tin-silver-copper (95.5/4/0.5) or **P** = non-RoHS tin-lead (63/37).

Packaging: **C**= 7″ machine-ready reel. EIA-481 embossed plastic tape). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
D= 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked
B= Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

2. Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4192A.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using an Agilent/HP 8753ES or equivalent.
5. DC current that causes the specified inductance drop from its value without current.
6. Current that causes the specified temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

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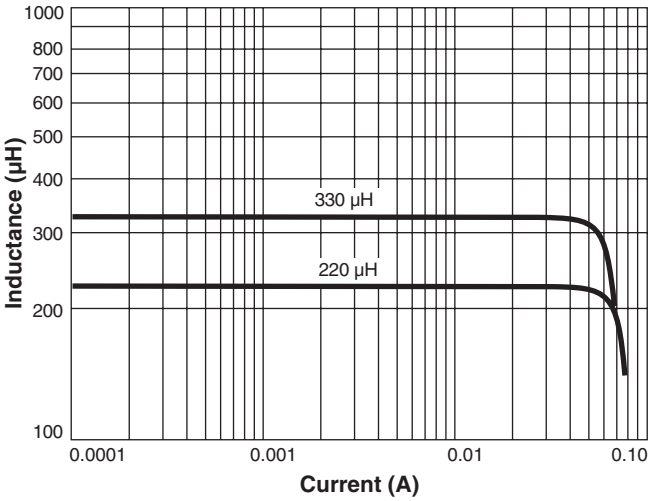
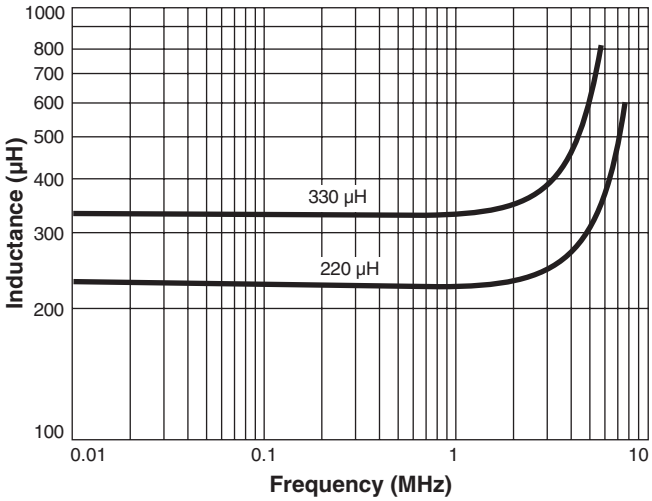
Document 1244-1 Revised 10/21/21

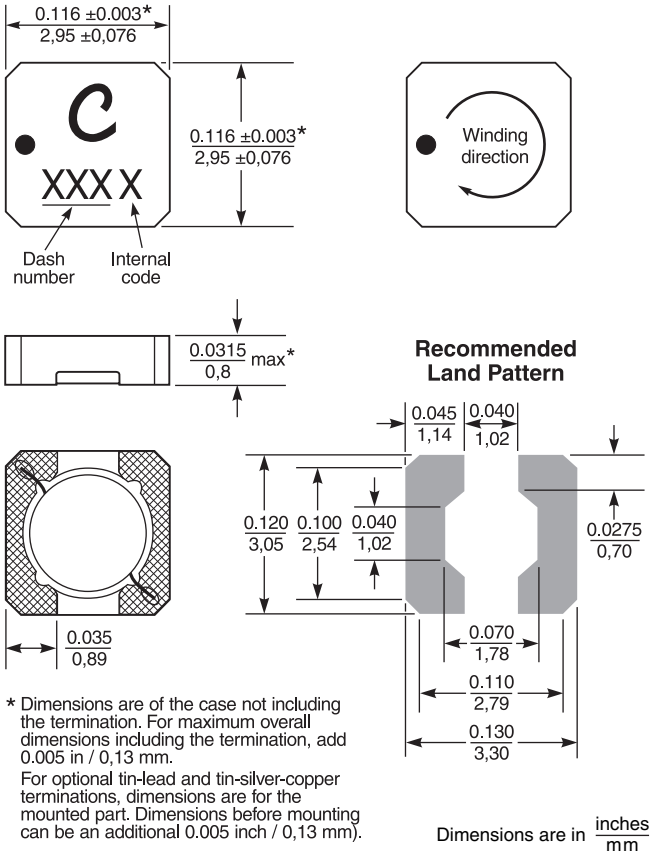
Shielded Power Inductors – LPZ3008

L vs Current



L vs Frequency





* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.005 in / 0,13 mm.
For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0,13 mm).

Dimensions are in inches / mm

Weight 22 – 25 mg
Packaging 1000/7″ reel; 3500/13″ reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.27 mm pocket depth
Recommended pick and place nozzle OD: 3 mm; ID: ≤ 1.5 mm

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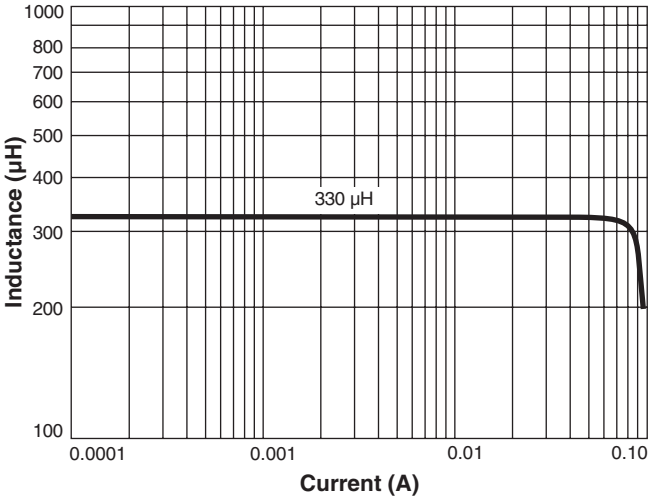
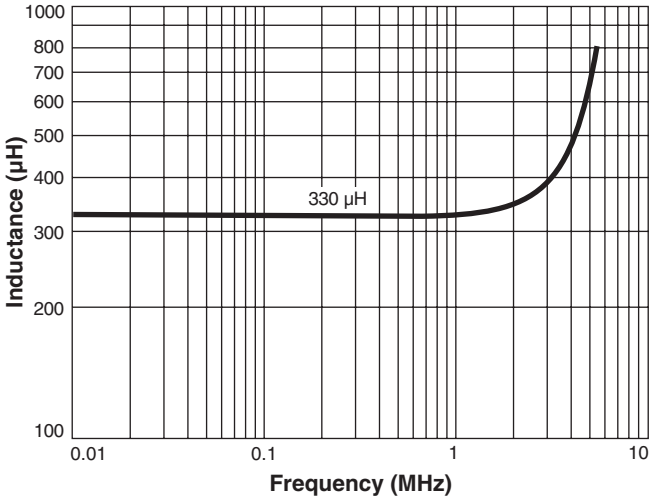
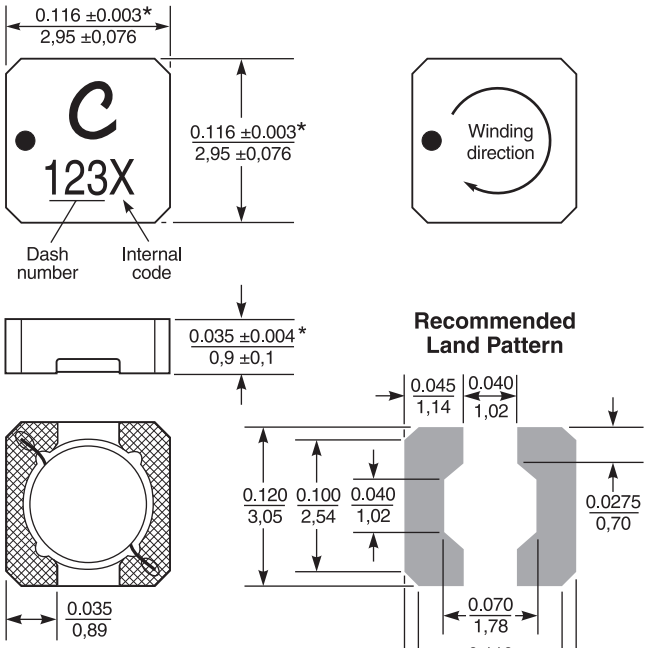
Shielded Power Inductors – LPZ3010

L vs Current



L vs Frequency





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For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0,13 mm).

Dimensions are in inches / mm

Weight 25 – 32 mg
Packaging 1000/7″ reel; 3500/13″ reel; Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.27 mm pocket depth
Recommended pick and place nozzle OD: 3 mm; ID: ≤ 1.5 mm

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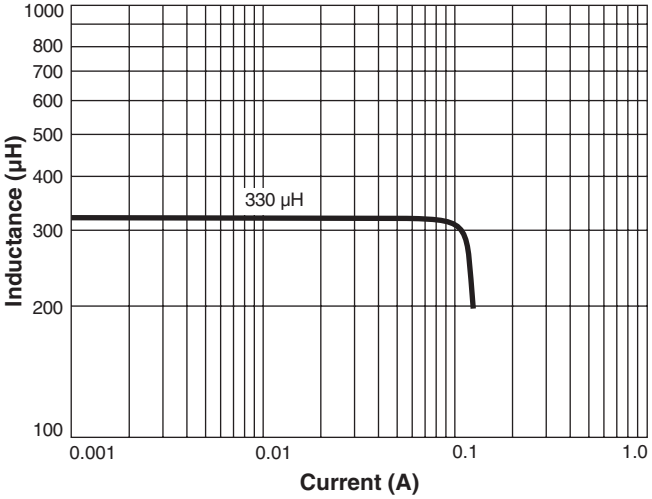
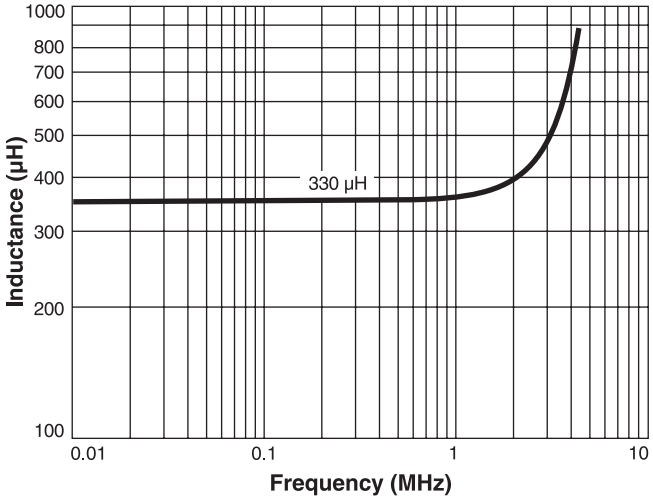
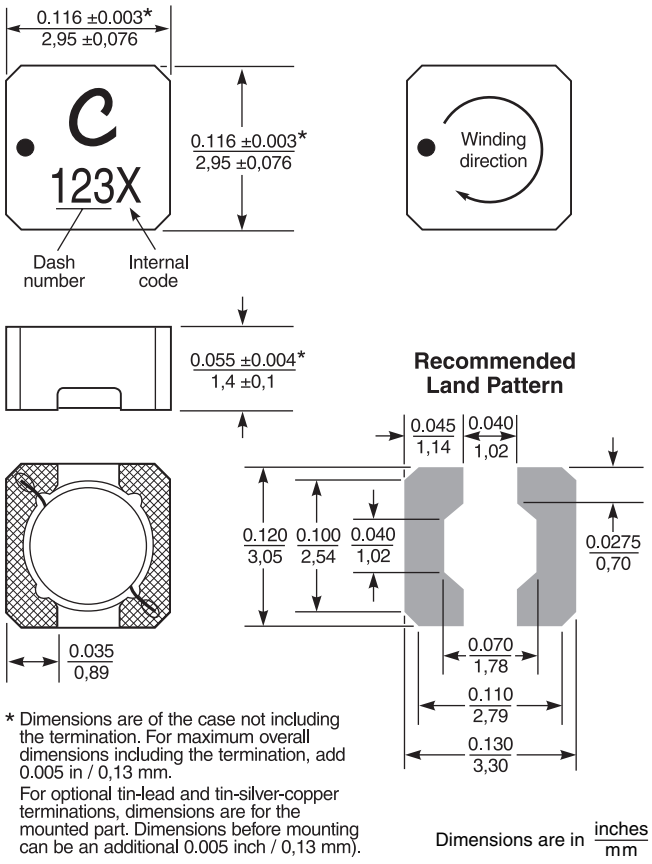
Shielded Power Inductor – LPZ3015

L vs Current



L vs Frequency





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For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0,13 mm).

Dimensions are in inches / mm

Weight 40 – 45 mg
Packaging 1000/7″ reel; 3500/13″ reel; Plastic tape: 12 mm wide, 0.26 mm thick, 8 mm pocket spacing, 1.65 mm pocket depth
Recommended pick and place nozzle OD: 3 mm; ID: ≤ 1.5 mm

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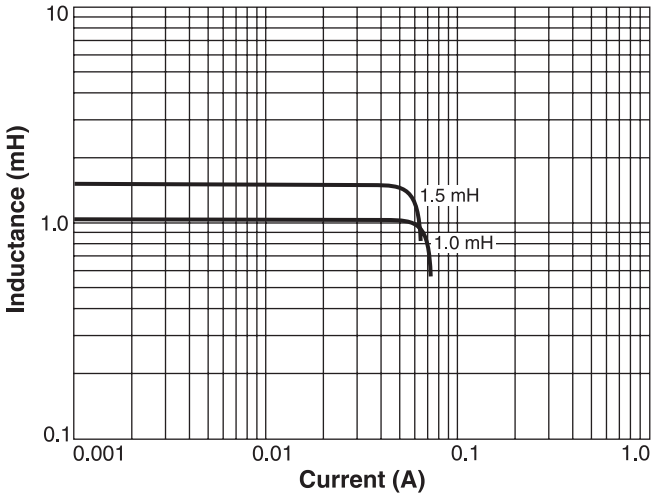
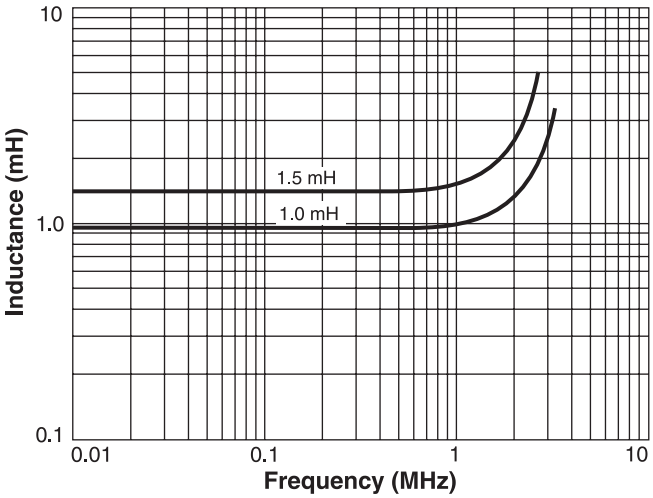
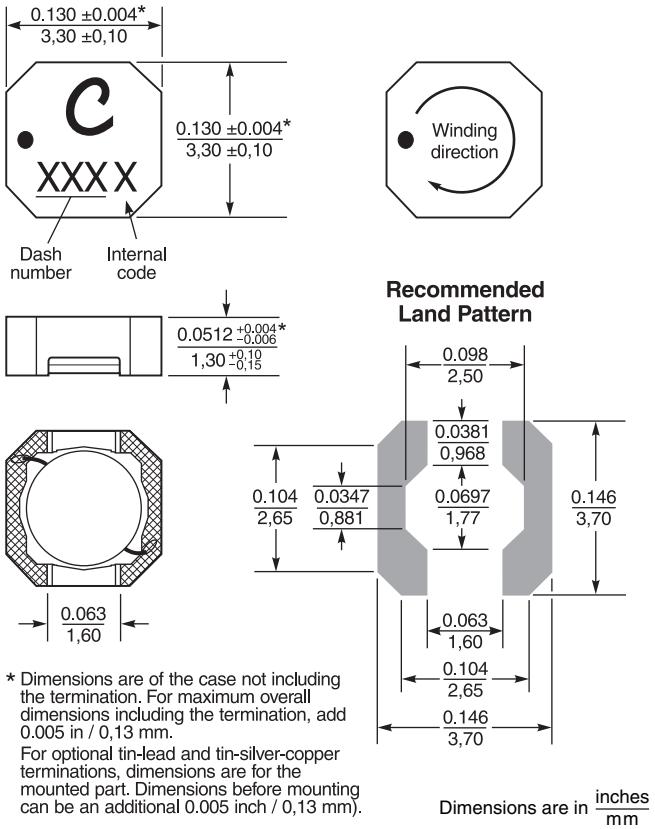
Shielded Power Inductors – LPZ3314

Typical L vs Current



Typical L vs Frequency





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For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0,13 mm).

Dimensions are in inches / mm

Weight 44.1 – 46.5 mg

Packaging 1000/7″ reel; 3500/13″ reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 1.52 mm pocket depth

Recommended pick and place nozzle OD: 3.3 mm; ID: ≤ 1.65 mm

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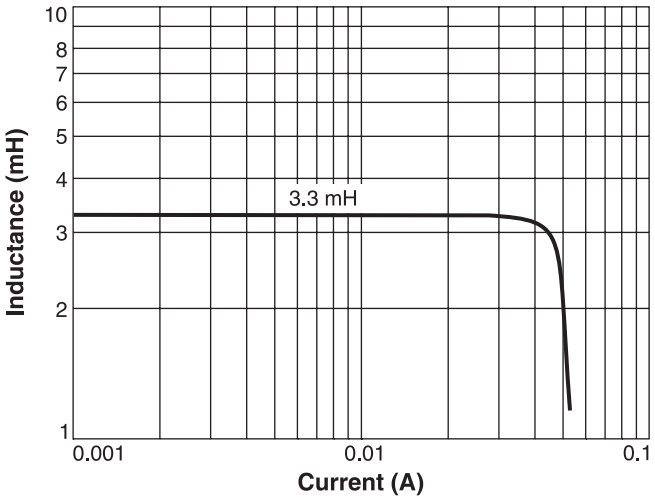
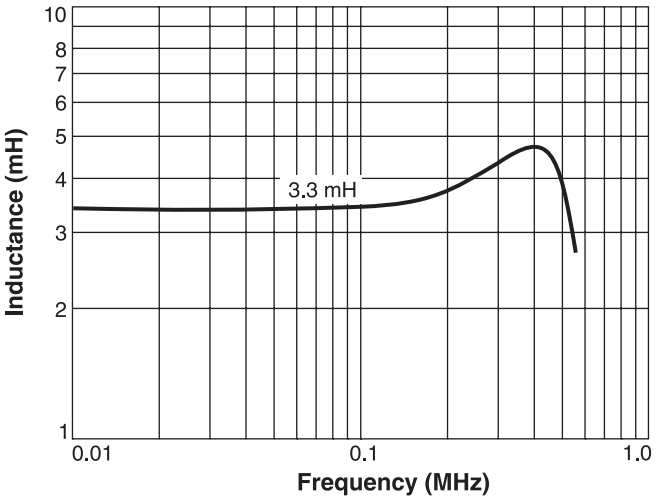
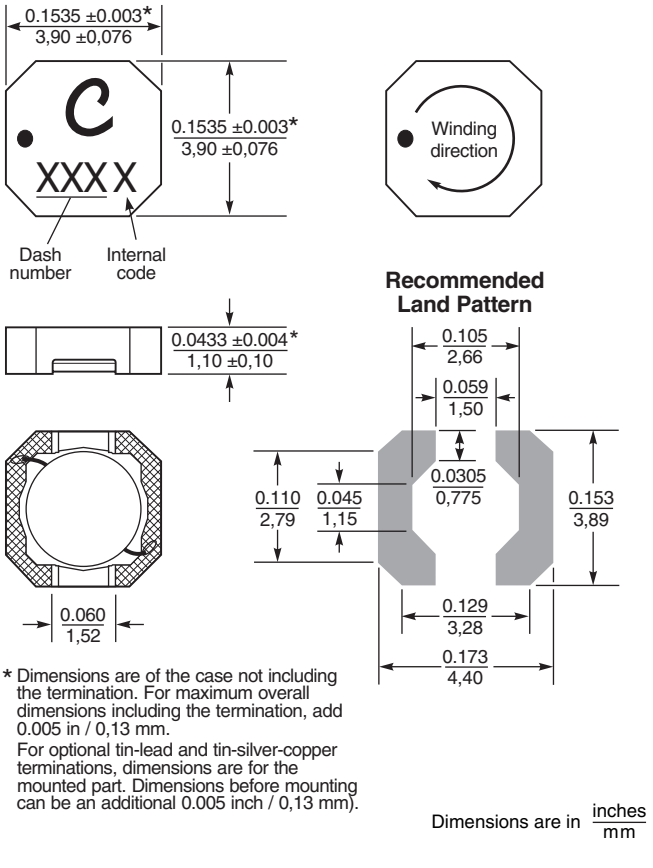
Shielded Power Inductors – LPZ4012

Typical L vs Current



Typical L vs Frequency





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For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0,13 mm).

Dimensions are in inches / mm

Weight 54 – 64 mg

Packaging 1000/7″ reel; 3500/13″ reel Plastic tape: 12 mm wide, 0.25 mm thick, 8 mm pocket spacing, 1.32 mm pocket depth

Recommended pick and place nozzle OD: 4 mm; ID: ≤ 2 mm

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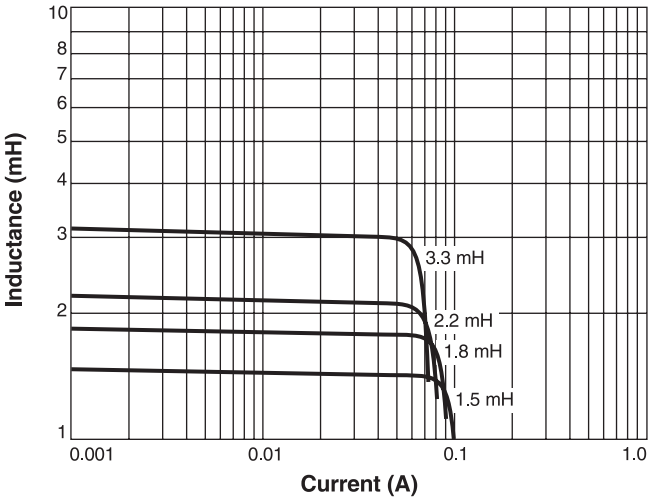
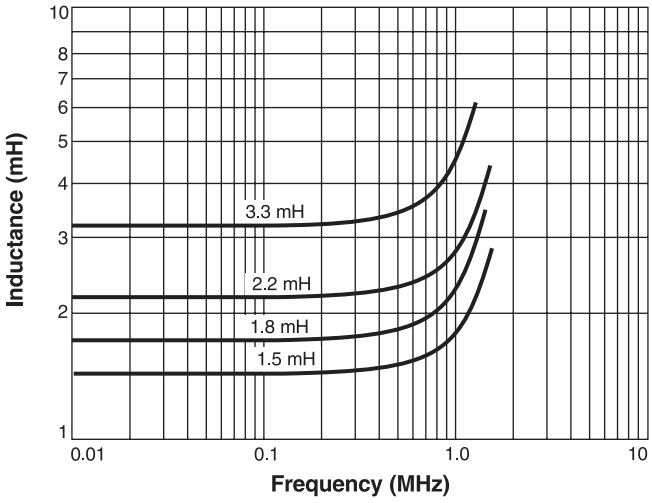
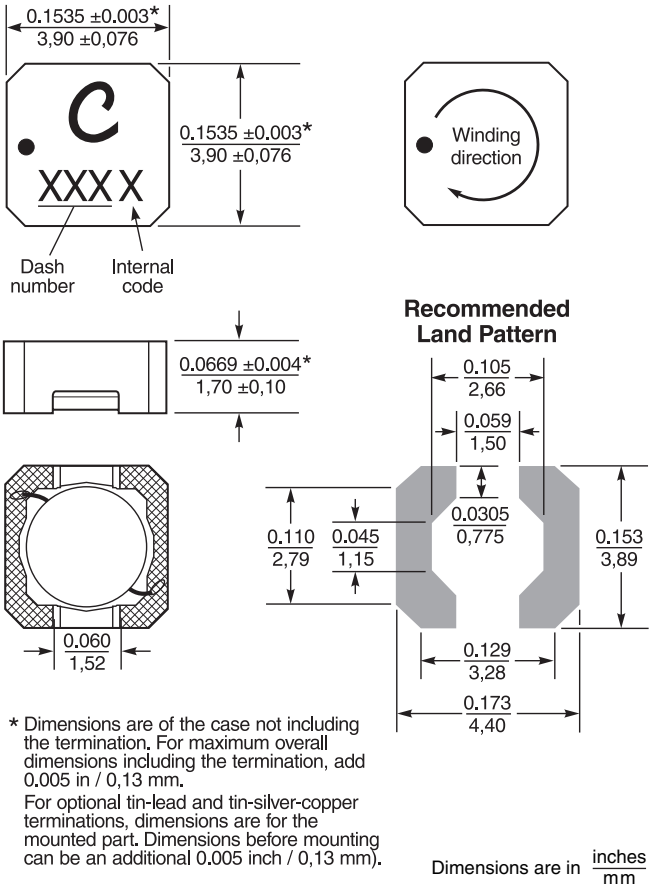
Shielded Power Inductors – LPZ4018

Typical L vs Current



Typical L vs Frequency





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For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0,13 mm).

Dimensions are in inches / mm

Weight 90 – 100 mg

Packaging 1000/7″ reel; 3500/13″ reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.9 mm pocket depth

Recommended pick and place nozzle OD: 4 mm; ID: ≤ 2 mm

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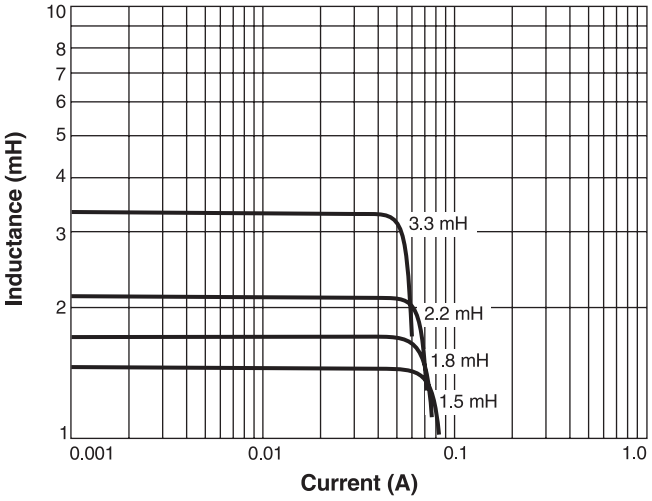
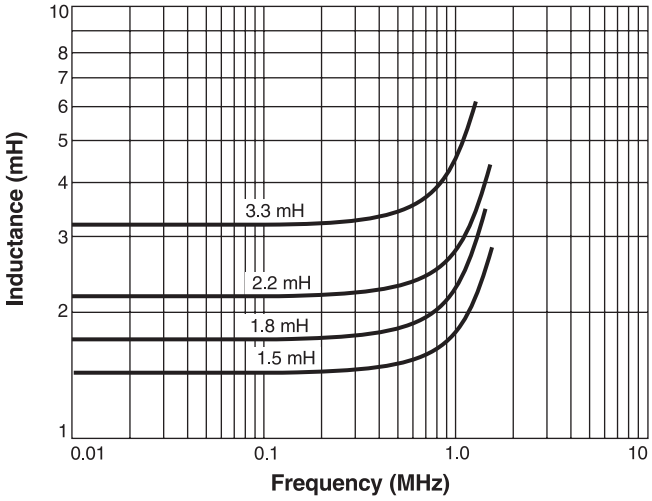
Document 1244-7 Revised 10/21/21

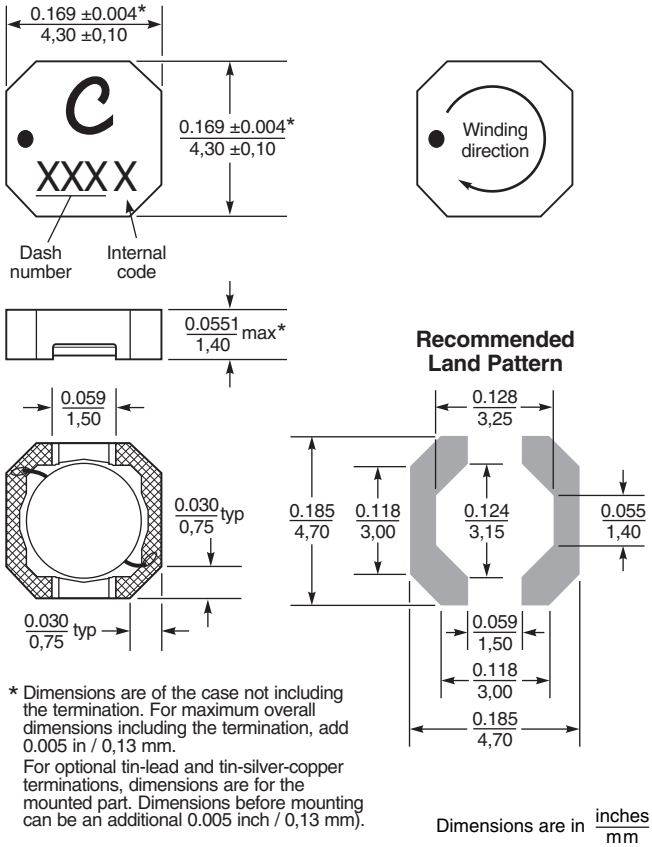
Shielded Power Inductors – LPZ4414

Typical L vs Current



Typical L vs Frequency





Weight 82.3 – 89.8 mg

Packaging 1000/7″ reel; 3500/13″ reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 1.52 mm pocket depth

Recommended pick and place nozzle: OD: 4.5 mm; ID: ≤2 mm

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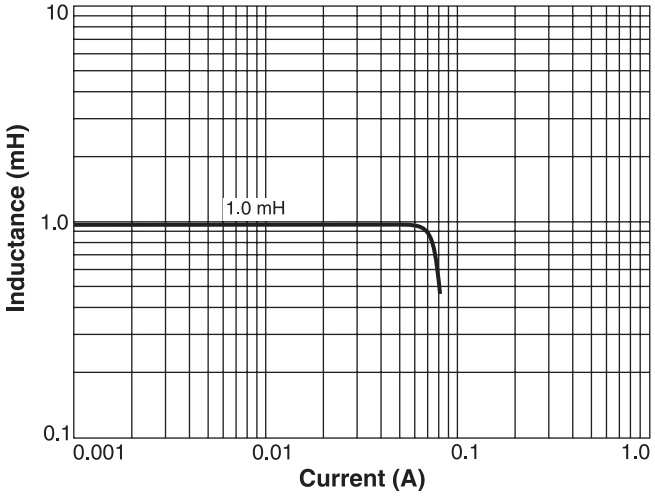
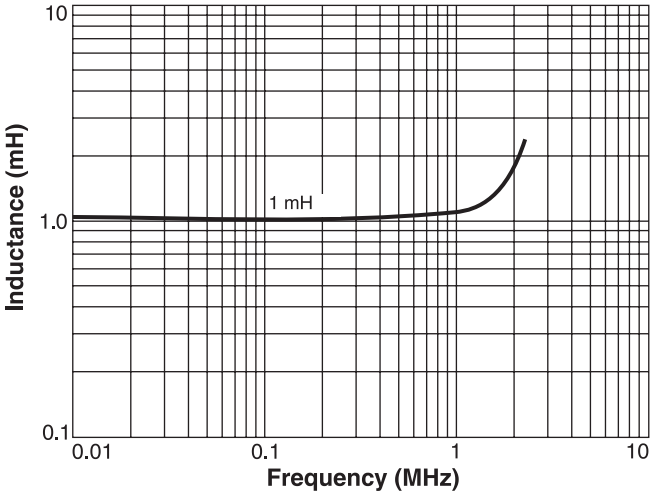
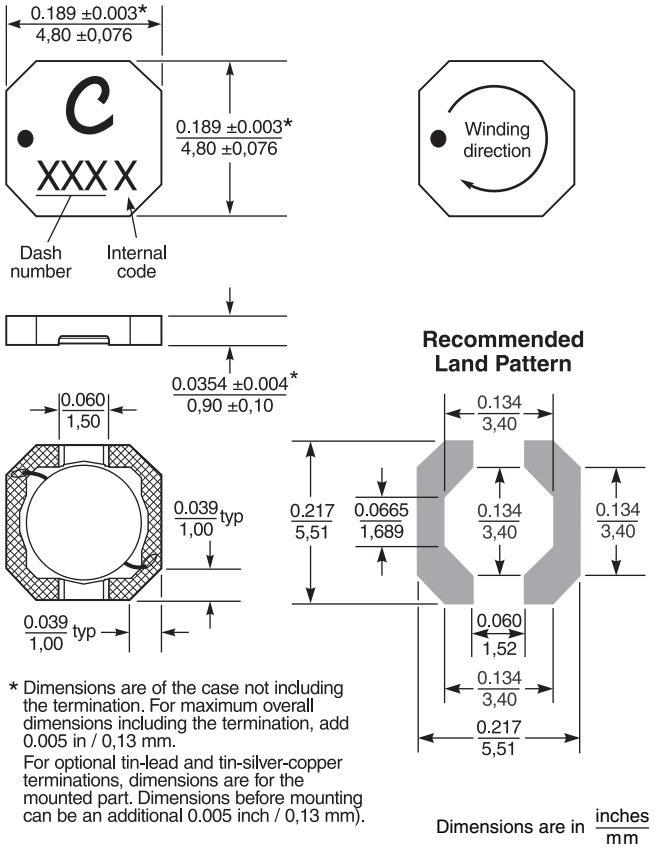
Shielded Power Inductor – LPZ5010

Typical L vs Current



Typical L vs Frequency





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For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0,13 mm).

Dimensions are in inches / mm

Weight 70 – 75 mg

Packaging 1000/7″ reel; 3500/13″ reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 1.02 mm pocket depth

Recommended pick and place nozzle OD: 5 mm; ID: ≤ 2.5 mm

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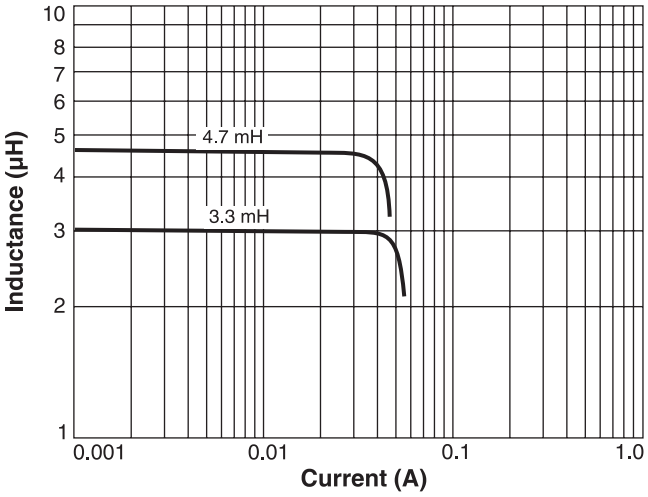
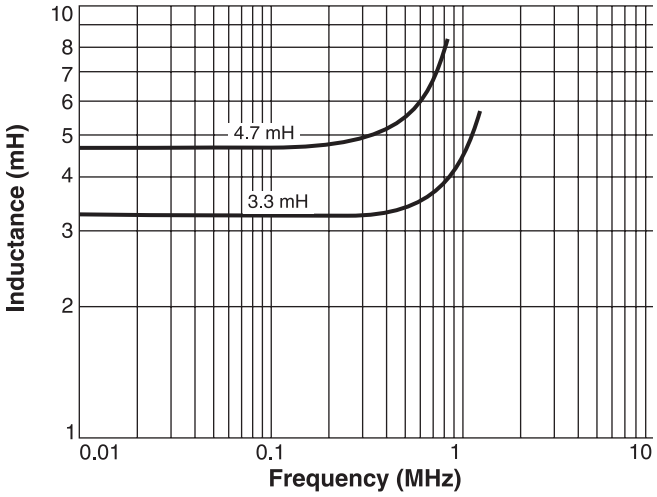
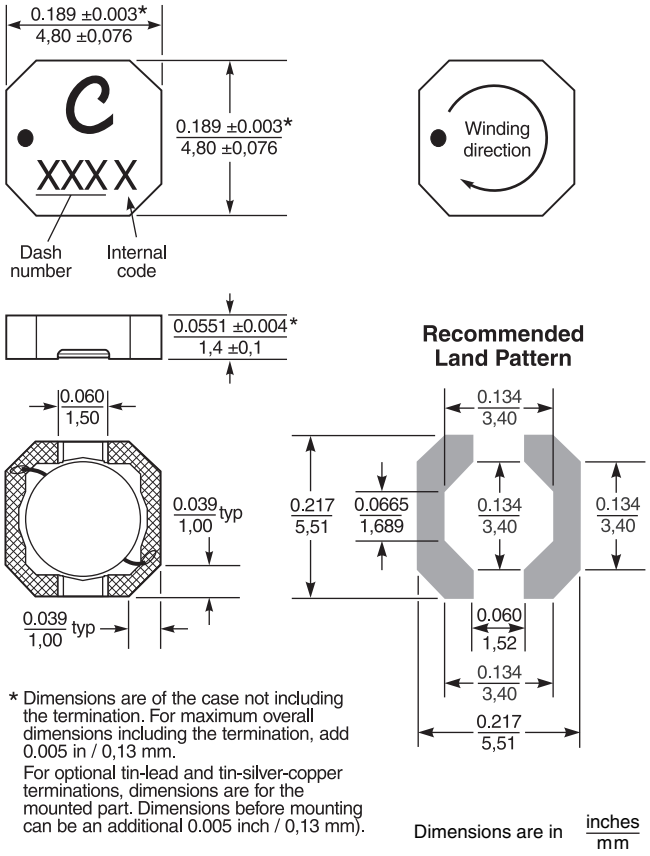
Shielded Power Inductors – LPZ5015

Typical L vs Current



Typical L vs Frequency





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Dimensions are in inches / mm

Weight 102 – 107 mg

Packaging 1000/7″ reel; 3500/13″ reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 1.57 mm pocket depth

Recommended pick and place nozzle OD: 5 mm; ID: ≤ 2.5 mm

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