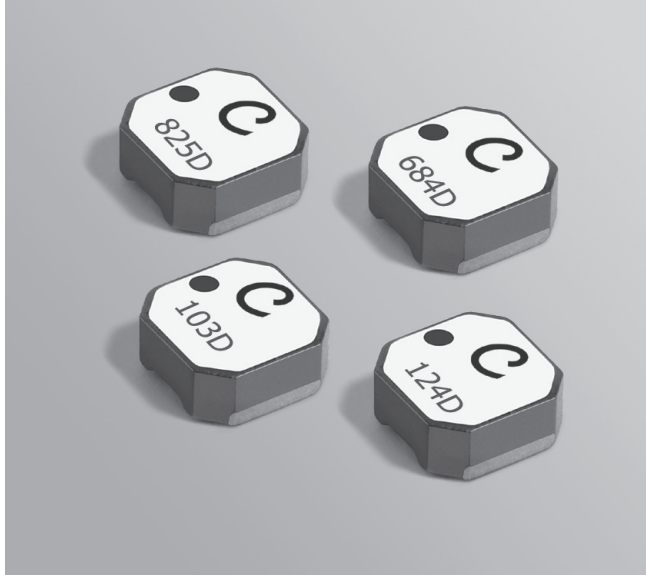




# Shielded Power Inductors – LPS6225



- Low DCR; high current; shielded construction
- Perfect for backlight applications

**Designer's Kit C349** contains 3 each of all values

**Core material** Ferrite

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Terminations** RoHS compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.

**Weight** 309 – 331 mg

**Ambient temperature** –40°C to +85°C with Irms current, +85°C to +125°C with derated current

**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)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging** 750/7" reel; 2500/13" reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 2.57 mm pocket depth

**Recommended pick and place nozzle** OD: 6.2 mm; ID: ≤ 3.1 mm

**PCB washing** Only pure water or alcohol recommended

Part number <sup>1</sup>	Inductance <sup>2</sup> ± 20% (µH)	DCR max <sup>3</sup> (Ohms)	SRF typ <sup>4</sup> (MHz)	Isat (A) <sup>5</sup>			Irms (A) <sup>6</sup>	
				10% drop	20% drop	30% drop	20°C rise	40°C rise
LPS6225-122ML_	1.2	0.040	178	5.3	5.4	5.4	1.1	1.65
LPS6225-222ML_	2.2	0.045	100	3.9	4.0	4.1	1.0	1.40
LPS6225-332ML_	3.3	0.055	68	3.5	3.5	3.6	1.0	1.35
LPS6225-472ML_	4.7	0.065	53	3.0	3.1	3.2	0.90	1.30
LPS6225-682ML_	6.8	0.095	40	2.6	2.7	2.8	0.90	1.30
LPS6225-103ML_	10	0.105	35	2.1	2.1	2.2	0.90	1.30
LPS6225-153ML_	15	0.135	23	2.1	2.2	2.2	0.85	1.20
LPS6225-223ML_	22	0.175	17	1.4	1.5	1.6	0.80	1.10
LPS6225-333ML_	33	0.260	14	1.1	1.2	1.2	0.65	0.90
LPS6225-473ML_	47	0.360	10	0.98	1.0	1.0	0.60	0.80
LPS6225-683ML_	68	0.420	9.6	0.58	0.61	0.62	0.57	0.74
LPS6225-104ML_	100	0.610	7.7	0.48	0.51	0.52	0.47	0.64
LPS6225-124ML_	120	0.750	7.4	0.42	0.45	0.46	0.43	0.58
LPS6225-154ML_	150	0.920	6.4	0.39	0.41	0.42	0.40	0.54
LPS6225-224ML_	220	1.30	5.0	0.32	0.34	0.35	0.37	0.50
LPS6225-334ML_	330	2.00	3.8	0.26	0.27	0.28	0.28	0.39
LPS6225-474ML_	470	2.60	3.2	0.22	0.23	0.24	0.24	0.37
LPS6225-684ML_	680	4.00	2.8	0.18	0.19	0.20	0.18	0.26
LPS6225-105ML_	1000	6.00	2.3	0.15	0.16	0.17	0.15	0.24
LPS6225-155ML_	1500	9.00	1.8	0.12	0.13	0.13	0.13	0.20
LPS6225-185ML_	1800	11.7	1.7	0.11	0.12	0.12	0.11	0.14
LPS6225-225ML_	2200	13.5	1.3	0.10	0.10	0.11	0.11	0.13
LPS6225-335ML_	3300	21.0	1.1	0.099	0.10	0.11	0.080	0.11
LPS6225-475ML_	4700	30.0	0.90	0.086	0.096	0.10	0.075	0.090
LPS6225-565ML_	5600	36.0	0.72	0.083	0.090	0.096	0.070	0.090
LPS6225-685ML_	6800	43.0	0.70	0.080	0.086	0.089	0.065	0.080
LPS6225-825ML_	8200	54.0	0.69	0.079	0.086	0.088	0.060	0.075
LPS6225-106ML_	10000	70.0	0.68	0.075	0.084	0.087	0.060	0.065

1. Please specify **termination** and **packaging** codes:

**LPS6225-106MLC**

**Termination:** L = RoHS compliant silver-palladium-platinum-glass frit.

Special order:

T = RoHS tin-silver-copper (95.5/4/0.5)  
or S = non-RoHS tin-lead (63/37).

**Packaging:** C = 7" machine-ready reel. EIA-481 embossed plastic tape (750 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (2500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.

3. DCR measured on a micro-ohmmeter.

4. SRF measured using 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.



[www.coilcraft.com](http://www.coilcraft.com)

**US** +1-847-639-6400 [sales@coilcraft.com](mailto:sales@coilcraft.com)

**UK** +44-1236-730595 [sales@coilcraft-europe.com](mailto:sales@coilcraft-europe.com)

**Taiwan** +886-2-2264 3646 [sales@coilcraft.com.tw](mailto:sales@coilcraft.com.tw)

**China** +86-21-6218 8074 [sales@coilcraft.com.cn](mailto:sales@coilcraft.com.cn)

**Singapore** + 65-6484 8412 [sales@coilcraft.com.sg](mailto:sales@coilcraft.com.sg)

Document 554-1 Revised 12/01/11

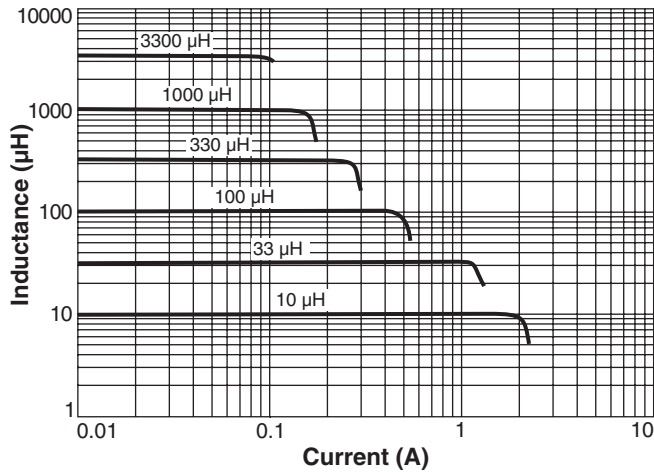
© Coilcraft Inc. 2011

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.

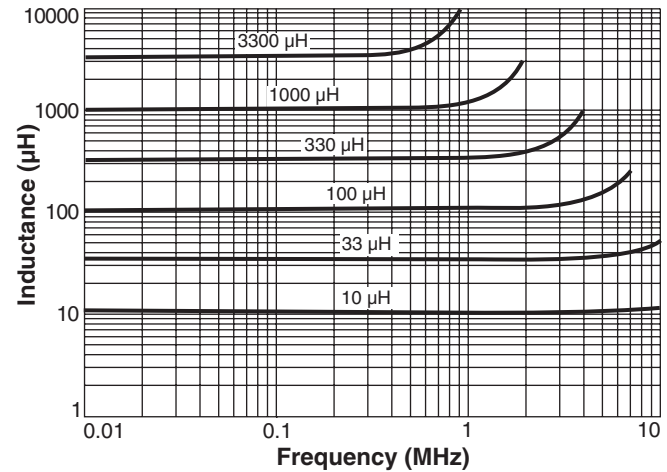


# Shielded SMT Power Inductors – LPS6225 Series

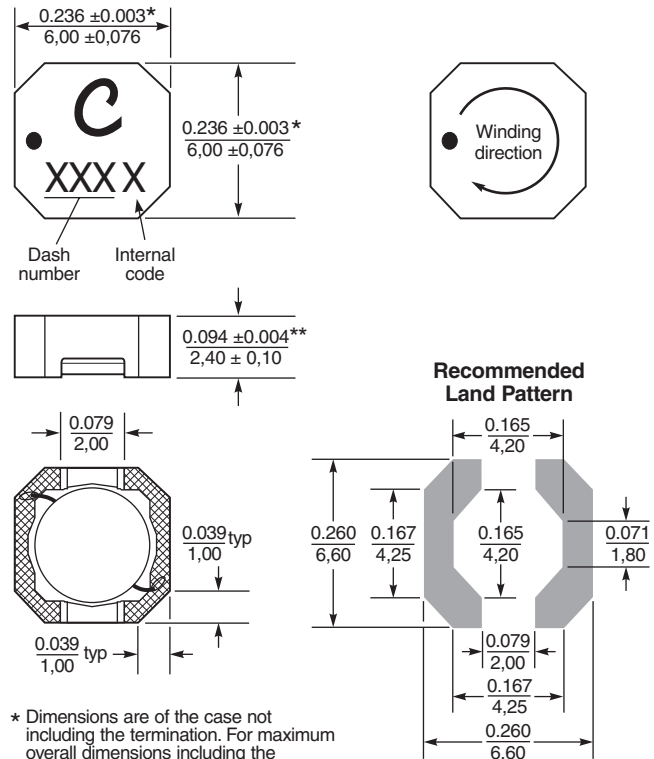
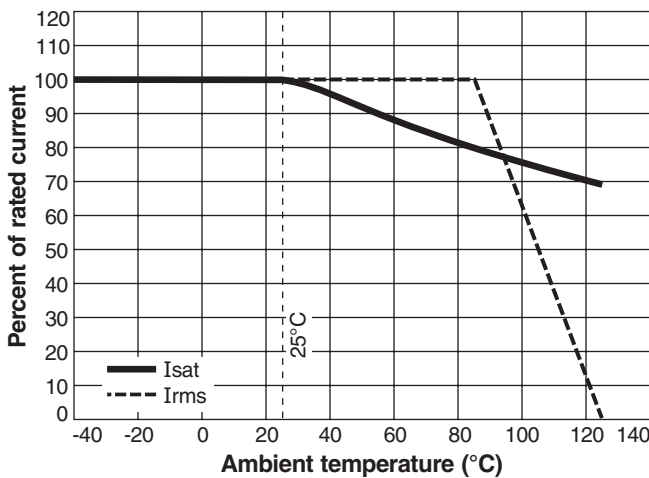
## Typical L vs Current



## Typical L vs Frequency



## Current Derating



\* 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



**US** +1-847-639-6400 sales@coilcraft.com  
**UK** +44-1236-730595 sales@coilcraft-europe.com  
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw  
**China** +86-21-6218 8074 sales@coilcraft.com.cn  
**Singapore** +65-6484 8412 sales@coilcraft.com.sg

Document 554-2 Revised 12/01/11

© Coilcraft Inc. 2011  
 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.