



Shielded Power Inductors – LPS6225

Improved version now available.

These parts are not recommended for new designs. They are replaced by new lead free and halogen free versions which are identical in form, fit and function. See www.coilcraft.com/lps6225.cfm.



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

Core material Ferrite

Core and winding loss See 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 (Refer to dimensional drawing for part orientation in tape.)

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

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			Irms (A) ⁶	
				10% drop	20% drop	30% drop	20°C rise	40°C rise
LPS6225-102ML_	1.0	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

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 554NR-1 Revised 10/22/18

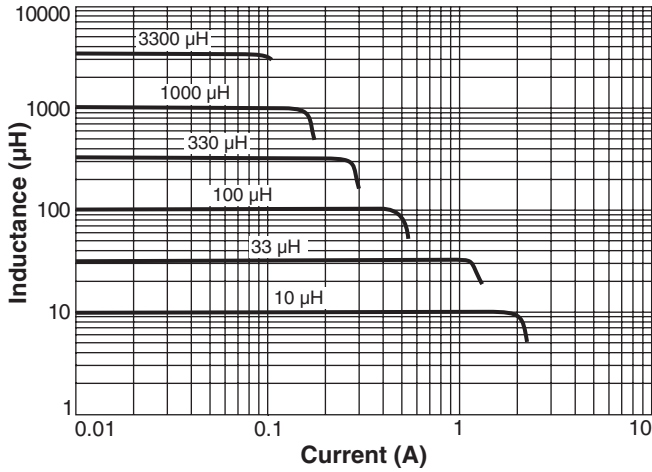
© Coilcraft Inc. 2018

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

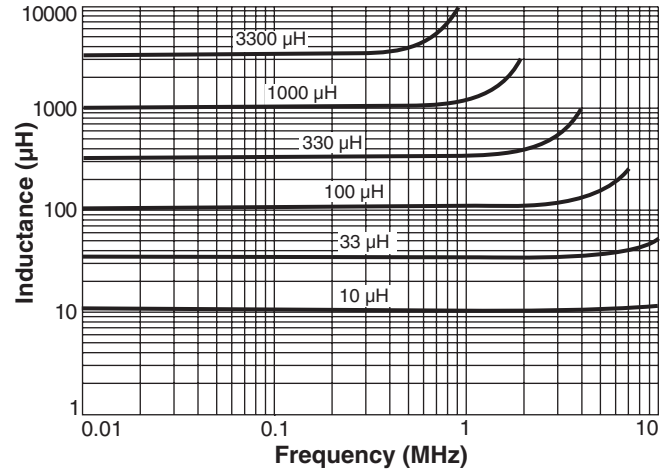


Shielded SMT Power Inductors – LPS6225 Series

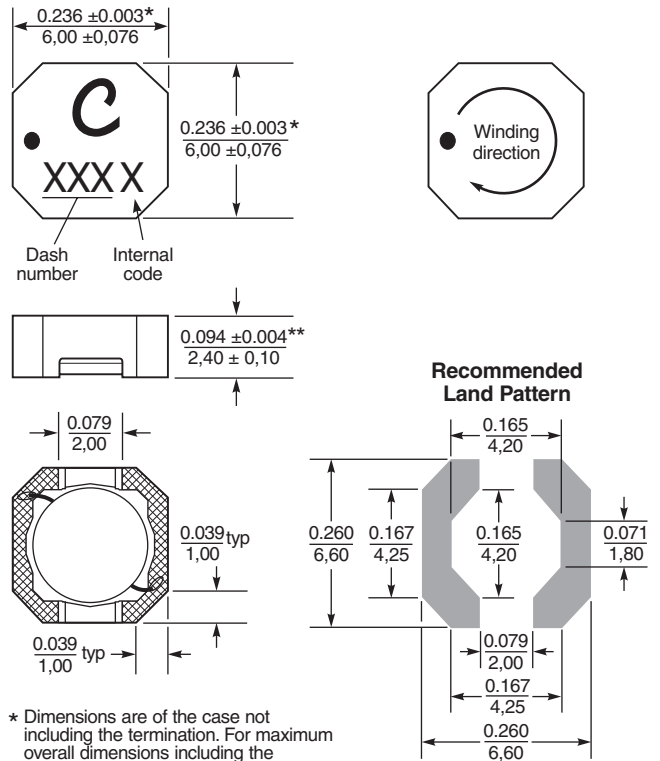
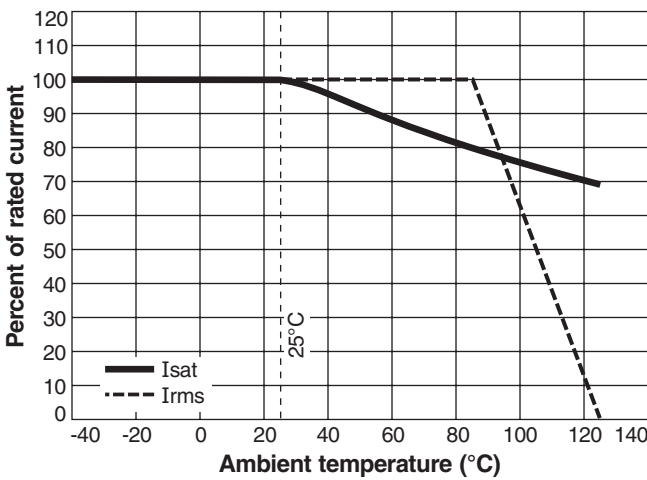
Typical L vs Current



Typical L vs Frequency



Current Derating



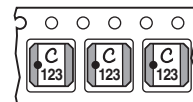
* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.005 in / 0,13 mm.

**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

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

Orientation of parts in packaging tape



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 554NR-2 Revised 10/22/18

© Coilcraft Inc. 2018
 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.