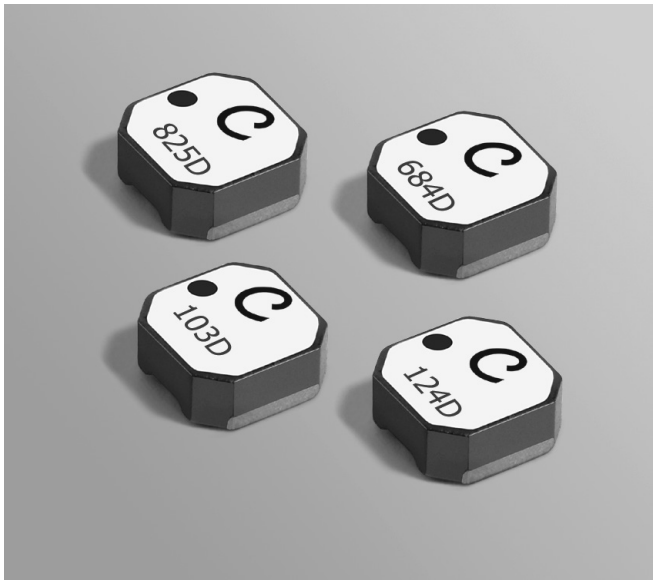
Shielded Power Inductors – LPS6225



- Low DCR; high current; shielded construction
- Perfect for backlight applications
- AEC-Q200 Grade 1 qualified (–40°C to +125°C ambient)

Designer's Kit C349 contains 3 each of all values
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. Other terminations available at additional cost.
Weight 309 – 331 mg
Ambient temperature –40°C to +125°C with (40°C rise) Irms current.
Maximum part temperature +165°C (ambient + temp rise). Derating.
Storage temperature Component: –40°C to +165°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)
Recommended pick and place nozzle OD: 6.2 mm; ID: ≤ 3.1 mm
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. 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
LPS6225-102MR_	1.0	0.040	178	5.3	5.4	5.4	1.1	1.65
LPS6225-222MR_	2.2	0.045	100	3.9	4.0	4.1	1.0	1.40
LPS6225-332MR_	3.3	0.055	68	3.5	3.5	3.6	1.0	1.35
LPS6225-472MR_	4.7	0.065	53	3.0	3.1	3.2	0.90	1.30
LPS6225-682MR_	6.8	0.095	40	2.6	2.7	2.8	0.90	1.30
LPS6225-103MR_	10	0.105	35	2.5	2.6	2.7	0.90	1.30
LPS6225-153MR_	15	0.170	23	2.1	2.2	2.2	0.85	1.20
LPS6225-223MR_	22	0.175	17	1.4	1.5	1.6	0.80	1.10
LPS6225-333MR_	33	0.260	14	1.1	1.2	1.2	0.65	0.90
LPS6225-473MR_	47	0.360	10	0.98	1.0	1.0	0.60	0.80
LPS6225-683MR_	68	0.420	9.6	0.58	0.61	0.62	0.57	0.74
LPS6225-104MR_	100	0.610	7.7	0.48	0.51	0.52	0.47	0.64
LPS6225-124MR_	120	0.750	7.4	0.42	0.45	0.46	0.43	0.58
LPS6225-154MR_	150	0.920	6.4	0.39	0.41	0.42	0.40	0.54
LPS6225-224MR_	220	1.30	5.0	0.32	0.34	0.35	0.37	0.50
LPS6225-334MR_	330	2.00	3.8	0.26	0.27	0.28	0.28	0.39
LPS6225-474MR_	470	2.60	3.2	0.22	0.23	0.24	0.24	0.37
LPS6225-684MR_	680	4.00	2.8	0.18	0.19	0.20	0.18	0.26
LPS6225-105MR_	1000	6.00	2.3	0.15	0.16	0.17	0.15	0.24
LPS6225-155MR_	1500	9.00	1.8	0.12	0.13	0.13	0.13	0.20
LPS6225-185MR_	1800	11.7	1.7	0.11	0.12	0.12	0.11	0.14
LPS6225-225MR_	2200	13.5	1.3	0.10	0.10	0.11	0.11	0.13
LPS6225-335MR_	3300	21.0	1.1	0.099	0.10	0.11	0.080	0.11
LPS6225-475MR_	4700	30.0	0.90	0.086	0.096	0.10	0.075	0.090
LPS6225-565MR_	5600	36.0	0.72	0.083	0.090	0.096	0.070	0.090
LPS6225-685MR_	6800	43.0	0.70	0.080	0.086	0.089	0.065	0.080
LPS6225-825MR_	8200	54.0	0.69	0.079	0.086	0.088	0.060	0.075
LPS6225-106MR_	10000	70.0	0.68	0.075	0.084	0.087	0.060	0.065

1. Please specify **termination** and **packaging** codes:
   LPS6225-106MRC
   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 (750 parts per full reel).
   D = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (2500 parts per full reel).
   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, 0 Adc.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 8753ES or equivalent.
5. DC current at 25°C that causes the specified inductance drop from its value without current. Click for temperature derating information.
6. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. Click for temperature derating information.
7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

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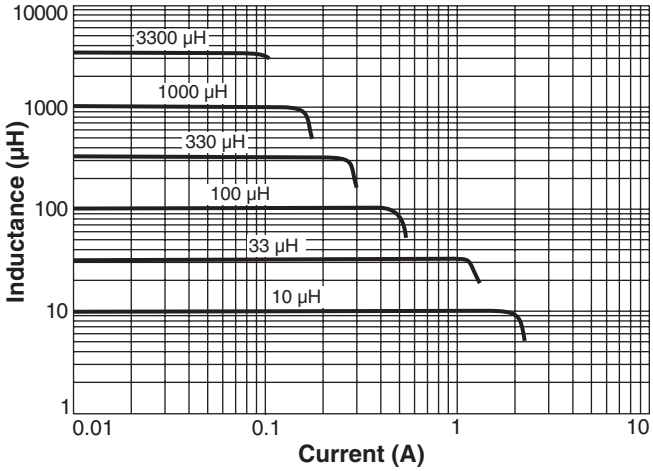
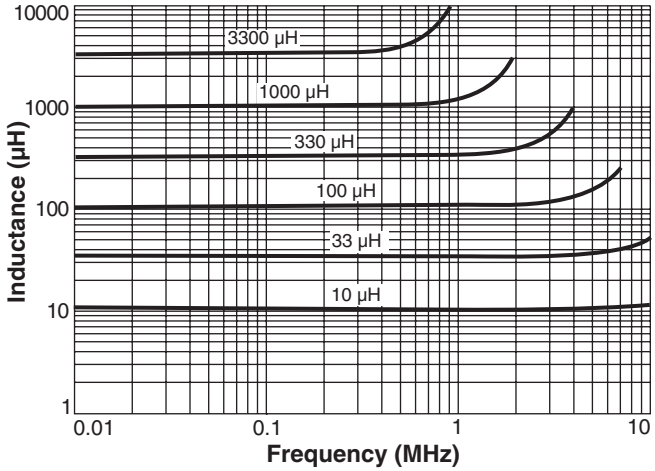
Specification subject to change without notice.
Please check web site for latest information.

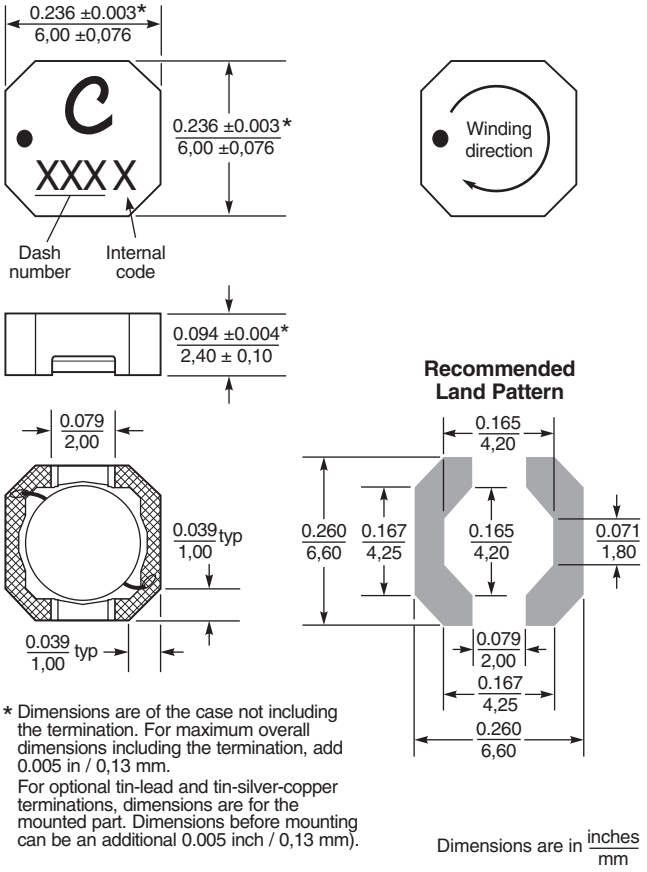
Shielded SMT Power Inductors – LPS6225 Series

Typical L vs Current



Typical L vs Frequency



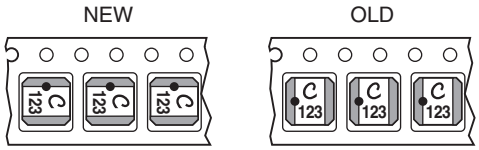


* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.005 in / 0,13 mm.
For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0,13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

NOTE NEW PART ORIENTATION Parts are rotated 90° in the packaging tape compared to previous versions of this product.



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Please check web site for latest information.

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