





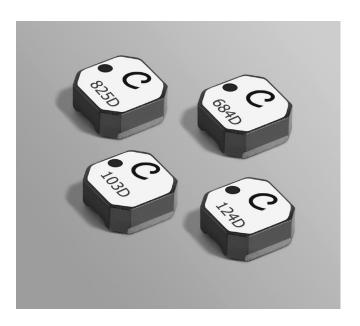






Shielded Power Inductors – LPS6225





- · 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

Environmental RoHS compliant, halogen free

Terminations RoHS compliant matte tin over nickel over silver. Other terminations available at additional cost.

Ambient temperature -40°C to $+85^{\circ}\text{C}$ with (40°C rise) Irms current. Maximum part temperature +125°C (ambient + temp rise). Derating.

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 Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

		DCR	SRF	Isat (A) ⁵		5	Irms (A) ⁶	
Part number ¹	Inductance ² ± 20% (µH)	max ³	typ ⁴ (MHz)	10% drop	20% drop	30% drop	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	0.135	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).

- **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 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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This product may not be used in medical or high risk applications without prior Collcraft approval.

Specification subject to change without notice.

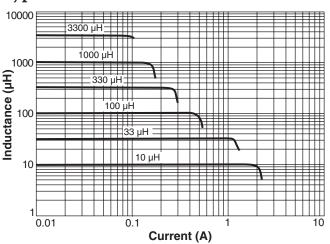
Please check web site for latest information.



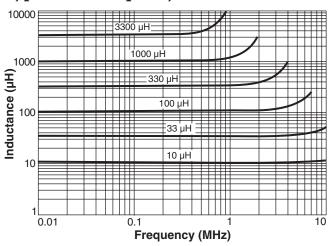
Shielded SMT Power Inductors - LPS6225 Series

Typical L vs Current



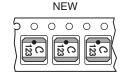


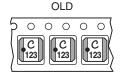
Typical L vs Frequency

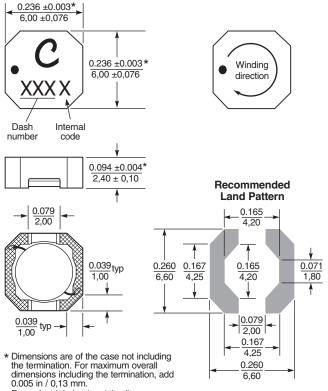


Packaging 750/7" reel; 2500/13" reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 2.57 mm pocket depth

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







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 $\frac{\text{inches}}{\text{mm}}$



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Coilcraft:

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LPS6225-474MLC LPS6225-104MLC LPS6225-124MLB LPS6225-104MLB LPS6225-153MLC LPS6225-224MLB
LPS6225-124MLC LPS6225-106MLC LPS6225-682MLC LPS6225-473MLC LPS6225-185MLC LPS6225-223MLB
LPS6225-475MLC LPS6225-683MLC LPS6225-222MLC LPS6225-223MLC LPS6225-122MLC LPS6225-222MLB
LPS6225-335MLC LPS6225-565MLC LPS6225-153MLB LPS6225-472MLC LPS6225-334MLC LPS6225-683MLB
LPS6225-185MLB LPS6225-225MLB LPS6225-105MLB LPS6225-825MLC LPS6225-155MLB LPS6225-472MLB
LPS6225-333MLB LPS6225-475MLB LPS6225-154MLC LPS6225-332MLC LPS6225-333MLC LPS6225-224MLC
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LPS6225-473MLB LPS6225-565MLB LPS6225-222MRC LPS6225-122MRC LPS6225-122MRB LPS6225-222MRB
LPS6225-154MRC LPS6225-153MRB LPS6225-103MRB LPS6225-124MRC LPS6225-155MRC LPS6225-224MRC
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