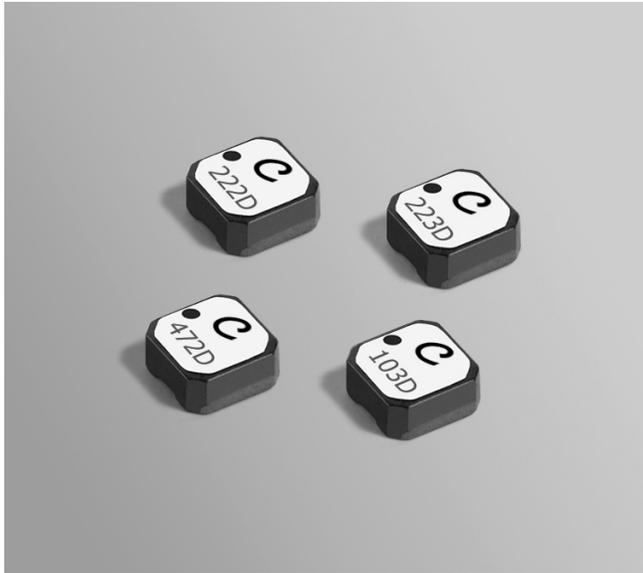


Shielded Power Inductors - LPS3314



- Very low DCR; excellent current handling
- Miniature 3.3 × 3.3 mm footprint; less than 1.4 mm tall

Designer's Kit C330 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 37.3 – 57.3 mg

Ambient temperature -40°C to +85°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 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

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 | | | Irms (A) ⁶ | |
|--------------------------|--------------------------------------|-----------------------------------|----------------------------------|-----------------------|-------------|-------------|-----------------------|--------------|
| | | | | 10% drop | 20% drop | 30% drop | 20°C rise | 40°C rise |
| LPS3314-102MR_ | 1.0 | 0.062 | 215 | 1.8 | 1.9 | 2.0 | 1.6 | 2.10 |
| LPS3314-222MR_ | 2.2 | 0.100 | 140 | 1.3 | 1.4 | 1.5 | 1.2 | 1.60 |
| LPS3314-332MR_ | 3.3 | 0.145 | 115 | 1.1 | 1.2 | 1.3 | 1.0 | 1.35 |
| LPS3314-472MR_ | 4.7 | 0.175 | 86 | 0.97 | 0.99 | 1.0 | 0.90 | 1.25 |
| LPS3314-562MR_ | 5.6 | 0.220 | 74 | 0.92 | 0.95 | 0.98 | 0.82 | 1.10 |
| LPS3314-682MR_ | 6.8 | 0.240 | 72 | 0.87 | 0.90 | 0.91 | 0.82 | 1.10 |
| LPS3314-822MR_ | 8.2 | 0.270 | 60 | 0.58 | 0.75 | 0.78 | 0.70 | 1.00 |
| LPS3314-103MR_ | 10 | 0.330 | 55 | 0.56 | 0.66 | 0.70 | 0.65 | 0.87 |
| LPS3314-153MR_ | 15 | 0.440 | 45 | 0.46 | 0.56 | 0.59 | 0.62 | 0.82 |
| LPS3314-183MR_ | 18 | 0.575 | 37 | 0.44 | 0.51 | 0.54 | 0.52 | 0.68 |
| LPS3314-223MR_ | 22 | 0.720 | 34 | 0.44 | 0.48 | 0.49 | 0.45 | 0.60 |
| LPS3314-333MR_ | 33 | 0.920 | 27 | 0.30 | 0.38 | 0.40 | 0.43 | 0.58 |
| LPS3314-473MR_ | 47 | 1.40 | 22 | 0.28 | 0.33 | 0.34 | 0.35 | 0.47 |
| LPS3314-563MR_ | 56 | 1.55 | 19 | 0.26 | 0.30 | 0.31 | 0.32 | 0.42 |
| LPS3314-683MR_ | 68 | 1.80 | 17 | 0.22 | 0.26 | 0.29 | 0.30 | 0.40 |
| LPS3314-823MR_ | 82 | 2.00 | 14 | 0.20 | 0.24 | 0.26 | 0.29 | 0.39 |
| LPS3314-104MR_ | 100 | 2.75 | 13 | 0.19 | 0.23 | 0.24 | 0.24 | 0.32 |
| LPS3314-124MR_ | 120 | 3.45 | 11 | 0.19 | 0.21 | 0.22 | 0.22 | 0.30 |
| LPS3314-154MR_ | 150 | 4.10 | 10 | 0.16 | 0.19 | 0.20 | 0.20 | 0.27 |
| LPS3314-184MR_ | 180 | 4.80 | 9.0 | 0.14 | 0.17 | 0.18 | 0.19 | 0.25 |
| LPS3314-224MR_ | 220 | 6.00 | 7.0 | 0.14 | 0.16 | 0.17 | 0.16 | 0.22 |
| LPS3314-334MR_ | 330 | 9.30 | 6.0 | 0.11 | 0.12 | 0.13 | 0.13 | 0.18 |
| LPS3314-474MR_ | 470 | 12.0 | 4.5 | 0.10 | 0.11 | 0.11 | 0.12 | 0.16 |
| LPS3314-564MR_ | 560 | 14.0 | 4.5 | 0.095 | 0.105 | 0.11 | 0.11 | 0.145 |
| LPS3314-684MR_ | 680 | 18.5 | 4.0 | 0.092 | 0.100 | 0.105 | 0.095 | 0.125 |
| LPS3314-824MR_ | 820 | 24.0 | 3.7 | 0.086 | 0.099 | 0.100 | 0.085 | 0.110 |

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

LPS3314-824MR_C

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).

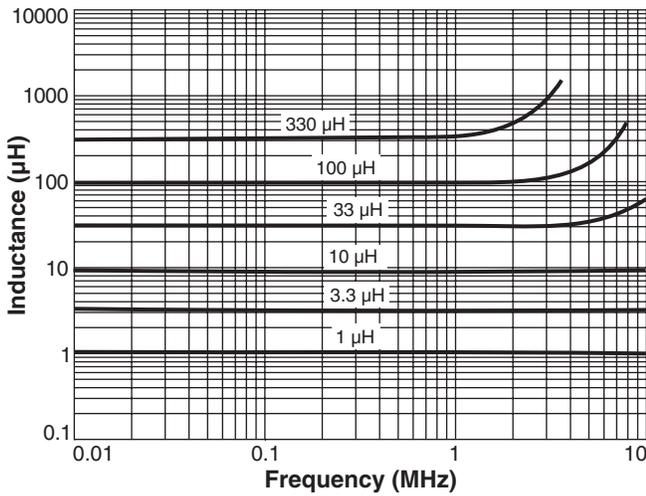
Packaging: C= 7" machine-ready reel. EIA-481 embossed plastic tape (1000 parts per full reel).
B= Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.
D= 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (3500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4192A impedance analyzer or equivalent. Inductance at 1 MHz is the same for parts with SRF ≥ 10 MHz.
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.

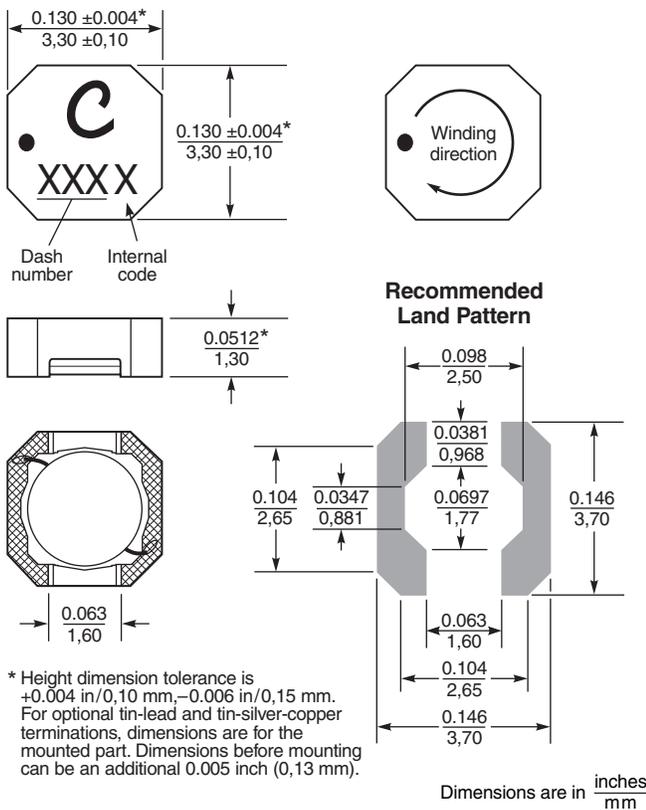
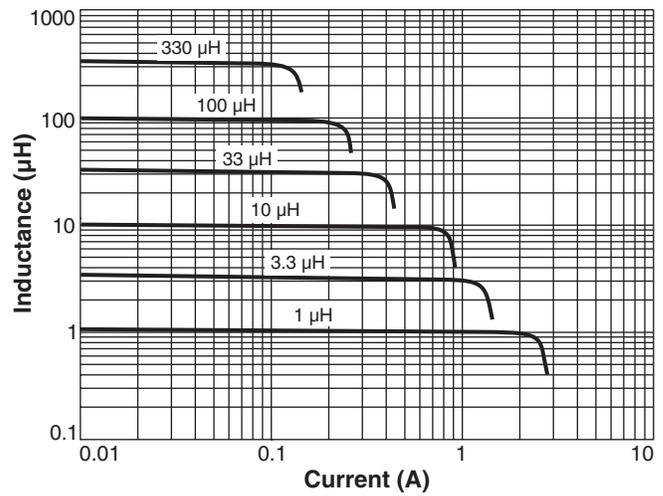


Shielded Power Inductors – LPS3314 Series

Typical L vs Frequency

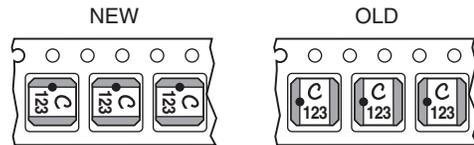


Typical L vs Current



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

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



* Height dimension tolerance is +0.004 in/0.10 mm, -0.006 in/0.15 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).



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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