



Power Inductors - DC1012 Series



These power inductors are especially effective as DC-DC converter boost or buck inductors and as output ripple filter chokes in all types of downsized switching power supplies.

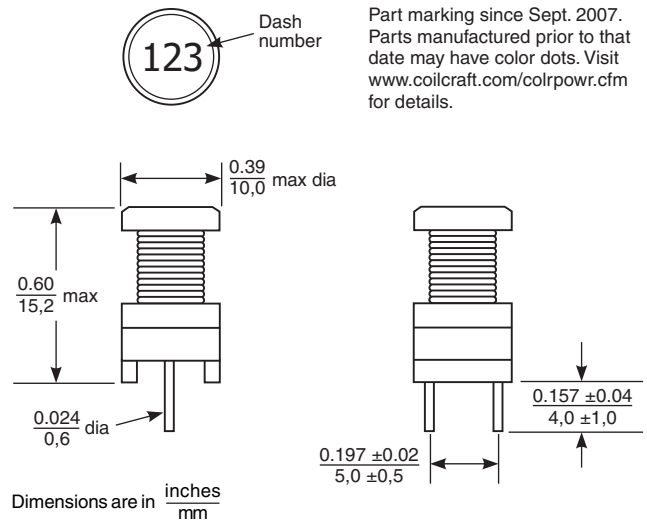
They are ideal for applications requiring small size, cost effective power inductors. The vertical style helps reduce power supply size by saving crucial printed circuit board area. The large inductance available per size makes these parts ideal for all sorts of energy storage, smoothing, and EMI reduction applications.

The Coilcraft DC1012 Series includes a wide range of EIA standard inductance values. Custom versions are also available.

Coilcraft **Designer's Kit P410** contains three samples of all the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

| Part number | Inductance ¹ ±10% (µH) | DCR max (Ohms) | SRF typ (MHz) | Isat ² (A) | Irms ³ (A) |
|-------------|--------------------------------------|----------------------|---------------------|--------------------------|--------------------------|
| DC1012-103L | 10 | 0.026 | 35 | 3.5 | 3.5 |
| DC1012-123L | 12 | 0.030 | 25 | 3.2 | 3.2 |
| DC1012-153L | 15 | 0.035 | 18 | 3.0 | 3.0 |
| DC1012-183L | 18 | 0.038 | 15 | 2.8 | 2.8 |
| DC1012-223L | 22 | 0.046 | 13 | 2.5 | 2.5 |
| DC1012-273L | 27 | 0.070 | 12 | 2.5 | 2.2 |
| DC1012-333L | 33 | 0.080 | 11 | 2.2 | 2.0 |
| DC1012-393L | 39 | 0.088 | 10 | 2.1 | 1.8 |
| DC1012-473L | 47 | 0.100 | 9.0 | 1.8 | 1.6 |
| DC1012-563L | 56 | 0.15 | 8.0 | 1.6 | 1.4 |
| DC1012-683L | 68 | 0.17 | 7.0 | 1.4 | 1.2 |
| DC1012-823L | 82 | 0.20 | 6.0 | 1.2 | 1.2 |
| DC1012-104L | 100 | 0.22 | 5.5 | 1.2 | 1.2 |
| DC1012-124L | 120 | 0.29 | 5.0 | 1.2 | 1.0 |
| DC1012-154L | 150 | 0.34 | 4.5 | 1.0 | 0.9 |
| DC1012-184L | 180 | 0.38 | 4.0 | 0.9 | 0.8 |
| DC1012-224L | 220 | 0.44 | 3.5 | 0.8 | 0.7 |
| DC1012-274L | 270 | 0.62 | 3.25 | 0.7 | 0.7 |
| DC1012-334L | 330 | 0.70 | 3.0 | 0.7 | 0.6 |

1. Tested at 100 kHz, 0.1 Vrms, 0 Adc.
2. DC current at which inductance drops 10% (typ) from its value without current.
3. Current that causes a 40°C temperature rise from 25°C ambient.
4. **Ambient temperature range:** -40°C to +85°C
5. **Storage temperature range:** Component: -40°C to +85°C
Packaging: -40°C to +80°C
6. Electrical specifications at 25°C.



Weight: 2.1 – 3.0 g
Terminations: Tin-silver over tin over copper over steel
Packaging: 100 parts per tray

Coilcraft®

Specifications subject to change without notice.
 Please check our website for latest information.

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