



# 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.

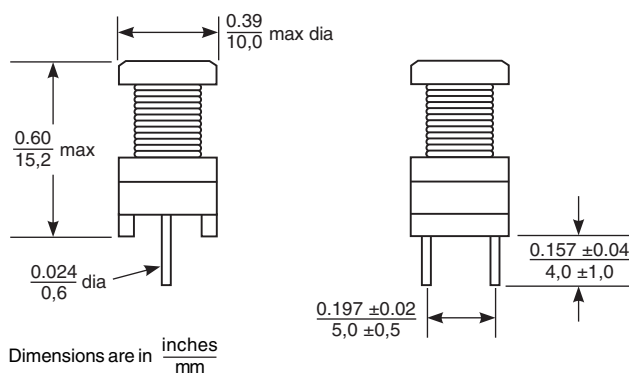
Coilcraft **Designer's Kit P410** contains three samples of all the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

Part number	Inductance <sup>1</sup> ±10% (µH)	DCR max (Ohms)	SRF typ (MHz)	Isat <sup>2</sup> (A)	Irms <sup>3</sup> (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.



Part marking since Sept. 2007. Parts manufactured prior to that date may have color dots. Visit [www.coilcraft.com/colrpowr.cfm](http://www.coilcraft.com/colrpowr.cfm) for details.



**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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