

# 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.

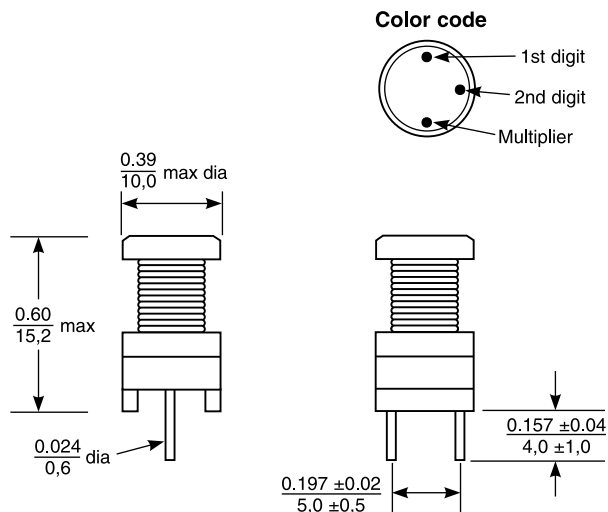
They are ideal for applications requiring small size, cost effective power inductors. The vertical style helps reduce power supply size by saving crucial printed circuit board area. The large inductance available per size makes these parts ideal for all sorts of energy storage, smoothing, and EMI reduction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

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

Coilcraft **Designer's Kit P210** 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)
DC1012-103	10	0.026	35	3.5	3.5
DC1012-123	12	0.030	25	3.2	3.2
<b>DC1012-153</b>	<b>15</b>	<b>0.035</b>	<b>18</b>	<b>3.0</b>	<b>3.0</b>
DC1012-183	18	0.038	15	2.8	2.8
DC1012-223	22	0.046	13	2.5	2.5
DC1012-273	27	0.070	12	2.5	2.2
DC1012-333	33	0.080	11	2.2	2.0
DC1012-393	39	0.088	10	2.1	1.8
DC1012-473	47	0.100	9.0	1.8	1.6
DC1012-563	56	0.15	8.0	1.6	1.4
DC1012-683	68	0.17	7.0	1.4	1.2
DC1012-823	82	0.20	6.0	1.2	1.2
DC1012-104	100	0.22	5.5	1.2	1.2
DC1012-124	120	0.29	5.0	1.2	1.0
DC1012-154	150	0.34	4.5	1.0	0.9
DC1012-184	180	0.38	4.0	0.9	0.8
DC1012-224	220	0.44	3.5	0.8	0.7
DC1012-274	270	0.62	3.25	0.7	0.7
DC1012-334	330	0.70	3.0	0.7	0.6
<b>R4793-A<sup>4</sup></b>	<b>18<sup>5</sup></b>	<b>0.035</b>	<b>15</b>	<b>4.9</b>	<b>4.9</b>

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. Average current for a 40°C rise above 25°C ambient.
4. P4793-A not included in Designer's Kit P210.
5. Operating temperature range -40°C to +85°C.
6. Electrical specifications at 25°C.



Weight: 2.1 – 3.0 g

**Coilcraft**<sup>®</sup>

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

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