



# Power Inductors – DR0810 Series



- Small footprint power inductors designed for maximum efficiency and low cost.
- Ideal for noise filtering in power amplifiers, power supplies and speaker crossover networks.
- Inductance values from 3.3 to 1000  $\mu\text{H}$ , most at 10% tolerance
- Current ratings up to 7.5 Amps with only 0.010 Ohms DCR
- Industry-standard pin spacings; protective PVC sleeve

**Core material** Ferrite

**Terminations** RoHS compliant tin-silver over copper

**Weight:** 2.0 – 2.7 g

**Ambient temperature**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  with  $I_{\text{rms}}$  current,  $+85^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  with derated current

**Storage temperature** Component:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

Tray packaging:  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at  $<30^{\circ}\text{C}$  / 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** 300 parts per tray; 800 parts in optional fan-fold tape

**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf

Part number <sup>1</sup>	Inductance <sup>2</sup> ( $\mu\text{H}$ )	DCR max (Ohms)	SRF typ <sup>3</sup> (MHz)	Isat (A) <sup>4</sup>			Irms (A) <sup>5</sup>	
				10% drop	20% drop	30% drop	20°C rise	40°C rise
DR0810-332L	3.3 $\pm 20\%$	0.010	47	8.9	10.2	11.0	7.0	9.5
DR0810-472L	4.7 $\pm 20\%$	0.012	33	7.4	8.5	9.3	6.4	8.8
DR0810-562L	5.6 $\pm 20\%$	0.017	28	6.2	7.4	8.2	5.8	8.1
DR0810-682L	6.8 $\pm 20\%$	0.018	26	5.6	6.7	7.4	5.2	7.4
DR0810-822L	8.2 $\pm 20\%$	0.019	25	5.2	6.2	6.8	4.6	6.7
DR0810-103L	10 $\pm 10\%$	0.026	23	5.1	6.1	6.6	4.0	6.0
DR0810-123L	12 $\pm 10\%$	0.030	20	4.0	4.6	5.1	3.8	5.7
DR0810-153L	15 $\pm 10\%$	0.035	18	3.8	4.5	5.0	3.5	5.3
DR0810-183L	18 $\pm 10\%$	0.038	15	3.5	4.1	4.5	3.3	5.0
DR0810-223L	22 $\pm 10\%$	0.046	14	3.4	4.0	4.4	3.1	4.6
DR0810-273L	27 $\pm 10\%$	0.070	11	3.1	3.7	4.0	2.8	4.3
DR0810-333L	33 $\pm 10\%$	0.080	10	2.9	3.4	3.7	2.6	3.9
DR0810-393L	39 $\pm 10\%$	0.088	10	2.5	2.9	3.2	2.4	3.6
DR0810-473L	47 $\pm 10\%$	0.10	9.5	2.3	2.7	3.0	2.1	3.2
DR0810-563L	56 $\pm 10\%$	0.15	8.0	1.9	2.2	2.5	1.9	2.9
DR0810-683L	68 $\pm 10\%$	0.17	7.0	2.0	2.3	2.5	1.7	2.5
DR0810-823L	82 $\pm 10\%$	0.20	7.0	1.7	2.0	2.2	1.4	2.2
DR0810-104L	100 $\pm 10\%$	0.22	6.0	1.5	1.8	2.0	1.2	1.8
DR0810-124L	120 $\pm 10\%$	0.29	5.0	1.2	1.5	1.6	1.1	1.7
DR0810-154L	150 $\pm 10\%$	0.34	4.5	1.1	1.4	1.5	1.1	1.6
DR0810-184L	180 $\pm 10\%$	0.38	4.0	1.1	1.3	1.4	1.0	1.5
DR0810-224L	220 $\pm 10\%$	0.44	4.0	1.0	1.2	1.3	0.93	1.40
DR0810-274L	270 $\pm 10\%$	0.62	3.8	0.90	1.1	1.2	0.86	1.28
DR0810-334L	330 $\pm 10\%$	0.70	3.6	0.88	1.0	1.1	0.80	1.20
DR0810-394L	390 $\pm 10\%$	0.88	3.0	0.86	0.98	1.0	0.73	1.10
DR0810-474L	470 $\pm 10\%$	1.00	2.7	0.78	0.90	0.99	0.66	0.97
DR0810-564L	560 $\pm 10\%$	1.11	2.5	0.72	0.85	0.93	0.60	0.86
DR0810-684L	680 $\pm 10\%$	1.45	2.5	0.62	0.72	0.79	0.53	0.76
DR0810-824L	820 $\pm 10\%$	1.70	2.1	0.54	0.67	0.72	0.46	0.66
DR0810-105L	1000 $\pm 10\%$	2.20	2.1	0.50	0.63	0.69	0.40	0.55

1. To order parts packaged in optional fanfold tape (800 parts per box), add the letter "F" at the end of the part number, e.g. DR0810-824LF

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.

3. SRF measured using an Agilent/HP 4191A or equivalent.

4. DC current at which the inductance drops the specified amount from its value without current

5. Current that causes the specified temperature rise from  $25^{\circ}\text{C}$  ambient.

6. Electrical specifications at  $25^{\circ}\text{C}$ .



www.coilcraft.com

**US** +1-847-639-6400 sales@coilcraft.com

**UK** +44-1236-730595 sales@coilcraft-europe.com

**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw

**China** +86-21-6218 8074 sales@coilcraft.com.cn

**Singapore** +65-6484 8412 sales@coilcraft.com.sg

Document 275-3 Revised 05/07/13

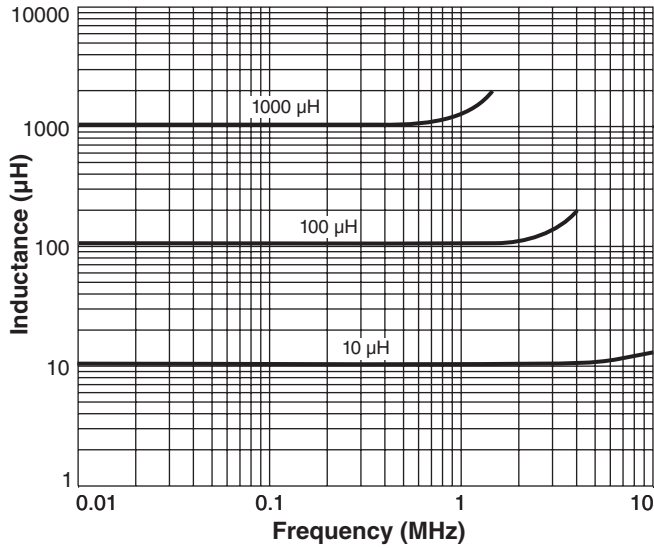
© Coilcraft Inc. 2013

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

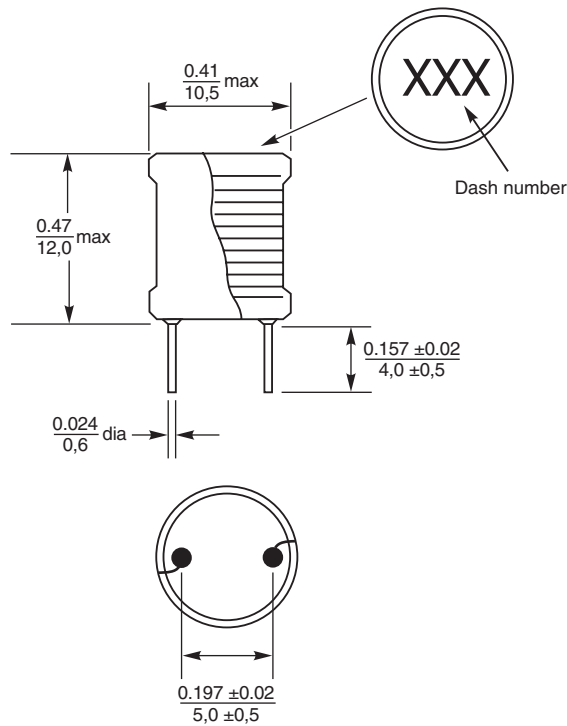
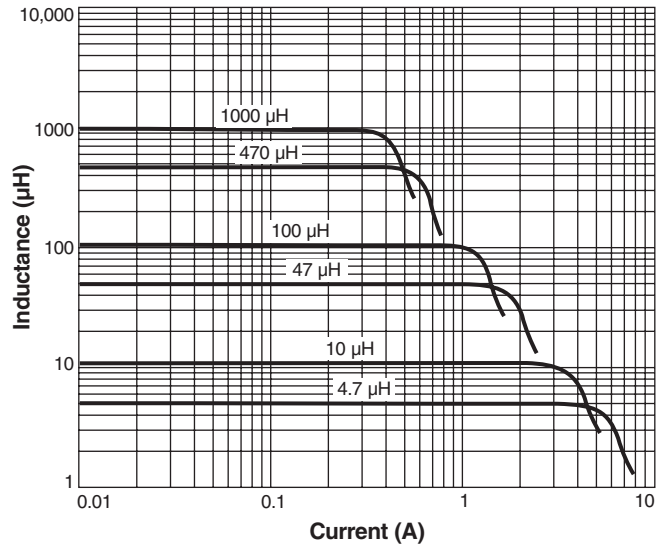


# Power Inductors - DR0810 Series

## Typical L vs Frequency



## Typical L vs Current



Dimensions are in  $\frac{\text{inches}}{\text{mm}}$



**US** +1-847-639-6400 sales@coilcraft.com  
**UK** +44-1236-730595 sales@coilcraft-europe.com  
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw  
**China** +86-21-6218 8074 sales@coilcraft.com.cn  
**Singapore** + 65-6484 8412 sales@coilcraft.com.sg

Document 275-4 Revised 05/07/13

© Coilcraft Inc. 2013  
 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Fixed Inductors](#) category:*

*Click to view products by [Coilcraft](#) manufacturer:*

Other Similar products are found below :

[MLZ1608M6R8WTD25](#) [MLZ1608N6R8LT000](#) [MLZ1608N3R3LTD25](#) [MLZ1608N3R3LT000](#) [MLZ1608N150LT000](#)

[MLZ1608M150WTD25](#) [MLZ1608M3R3WTD25](#) [MLZ1608M3R3WT000](#) [MLZ1608M150WT000](#) [MLZ1608A1R5WT000](#)

[MLZ1608N1R5LT000](#) [B82432C1333K000](#) [PCMB053T-1R0MS](#) [PCMB053T-1R5MS](#) [PCMB104T-1R5MS](#) [CR32NP-100KC](#) [CR32NP-](#)

[151KC](#) [CR32NP-180KC](#) [CR32NP-181KC](#) [CR32NP-1R5MC](#) [CR32NP-390KC](#) [CR32NP-3R9MC](#) [CR32NP-680KC](#) [CR32NP-820KC](#)

[CR32NP-8R2MC](#) [CR43NP-390KC](#) [CR43NP-560KC](#) [CR43NP-680KC](#) [CR54NP-181KC](#) [CR54NP-470LC](#) [CR54NP-820KC](#) [CR54NP-8R5MC](#)

[MGDQ4-00004-P](#) [MGDU1-00016-P](#) [MHL1ECTTP18NJ](#) [MHL1JCTTD12NJ](#) [PE-51506NL](#) [PE-53601NL](#) [PE-53630NL](#) [PE-53824SNLT](#) [PE-](#)

[62892NL](#) [PE-92100NL](#) [PG0434.801NLT](#) [PG0936.113NLT](#) [PM06-2N7](#) [PM06-39NJ](#) [HC2LP-R47-R](#) [HC2-R47-R](#) [HC3-2R2-R](#) [HC8-1R2-R](#)