



# SMT Power Inductors - DS1608 Series



These shielded, ultraminiature inductors can help achieve significantly longer battery life in handheld communication devices and other portable products.

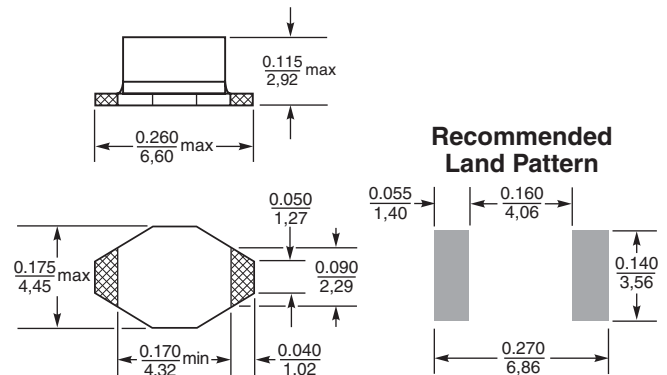
They offer the highest efficiency, smallest size and lowest cost of any comparable part. DCR is 10 to 60% lower than other inductors, with greatest improvements seen at values from 100 to 10,000  $\mu\text{H}$ . Their flat top and heat resistant materials ensure trouble-free assembly and reflow operations.

Coilcraft **Designer's Kit C115** contains samples of each of the standard parts shown. To order, contact Coilcraft or visit <http://order.coilcraft.com>.

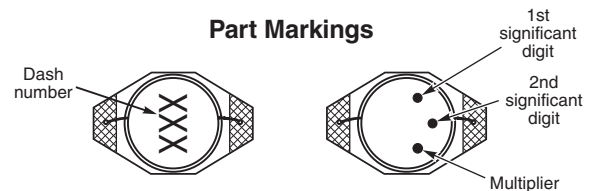
**SPICE models** ON OUR WEB SITE OR CD

Part number <sup>1</sup>	L $\pm 20\%$ <sup>2</sup> ( $\mu\text{H}$ )	Q min	DCR max (Ohms)	SRF typ (MHz)	Isat <sup>3</sup> (A)
DS1608C-102	1.0	30 @ 200 kHz	0.040	250	1.4
DS1608C-152	1.5	30 @ 200 kHz	0.045	125	0.93
DS1608C-222	2.2	40 @ 200 kHz	0.050	120	0.92
DS1608C-332	3.3	40 @ 200 kHz	0.055	120	0.75
DS1608C-472	4.7	40 @ 200 kHz	0.060	105	0.58
DS1608C-682	6.8	40 @ 200 kHz	0.065	50	0.58
DS1608C-103	10	40 @ 200 kHz	0.075	38	0.37
DS1608C-153	15	40 @ 100 kHz	0.090	33	0.31
DS1608C-223	22	40 @ 100 kHz	0.11	25	0.30
DS1608C-333	33	40 @ 100 kHz	0.19	20	0.30
DS1608C-473	47	40 @ 100 kHz	0.23	20	0.24
DS1608C-683	68	40 @ 100 kHz	0.29	15	0.17
DS1608C-104	100	40 @ 100 kHz	0.48	10	0.13
DS1608C-154	150	40 @ 100 kHz	0.59	9	0.10
DS1608C-224	220	40 @ 100 kHz	0.77	6	0.10
DS1608C-334	330	40 @ 100 kHz	1.4	5	0.07
DS1608C-474	470	40 @ 100 kHz	1.8	4	0.06
DS1608C-684	680	40 @ 100 kHz	2.2	3	0.055
DS1608C-105	1000	40 @ 100 kHz	3.4	2	0.045
DS1608C-155	1500	50 @ 100 kHz	4.2	2	0.035
DS1608C-225	2200	50 @ 100 kHz	8.5	2	0.028
DS1608C-335	3300	50 @ 100 kHz	11.0	1	0.024
DS1608C-475	4700	50 @ 100 kHz	13.9	1	0.021
DS1608C-685	6800	50 @ 100 kHz	25.0	1	0.019
DS1608C-106	10000	50 @ 100 kHz	32.8	0.8	0.017

- Part number on reel label will have a suffix to indicate packaging:  
C = machine ready 7" reel, B = partial reel, D = machine-ready 13" reel.
  - Inductance tested at 0.1 Vrms, 100 kHz, 0 Adc.
  - DC current at which the inductance drops 30% (typ.) from its value without current.
  - Operating temperature -40°C to +85°C.
  - Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data.  
See Color Coding section for part marking data.



## Part Markings



**Weight:** 144 – 167 mg  
**Terminations:** Nickel/gold over moly-manganese  
**Tape and reel:** 750/7" reel; 2500/13" reel 12 mm tape width  
 For packaging data see Tape and Reel Specifications section.

# Coilcraft®

Specifications subject to change without notice.

Please check our website for latest information. Document 186-1 Revised 12/22/04

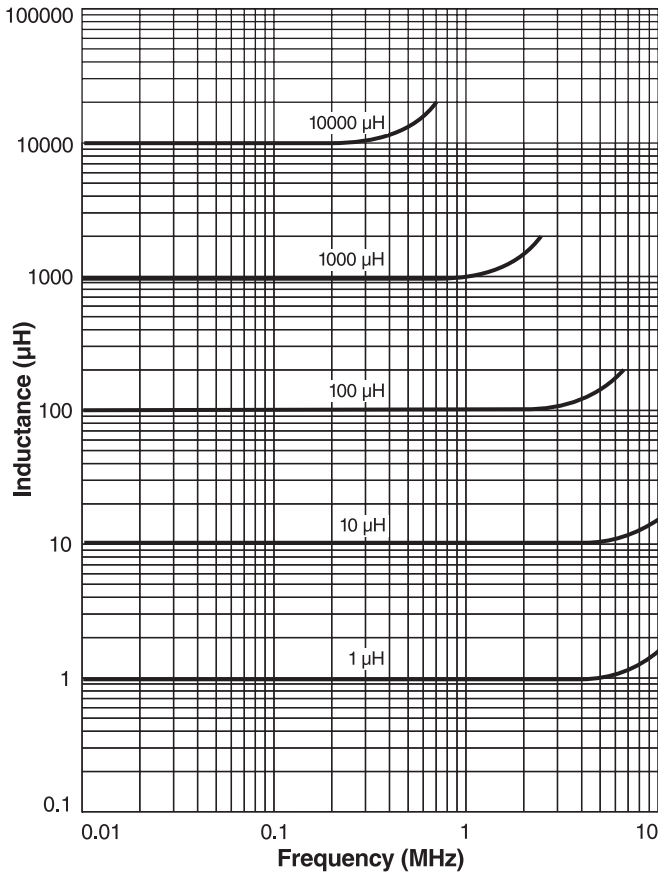
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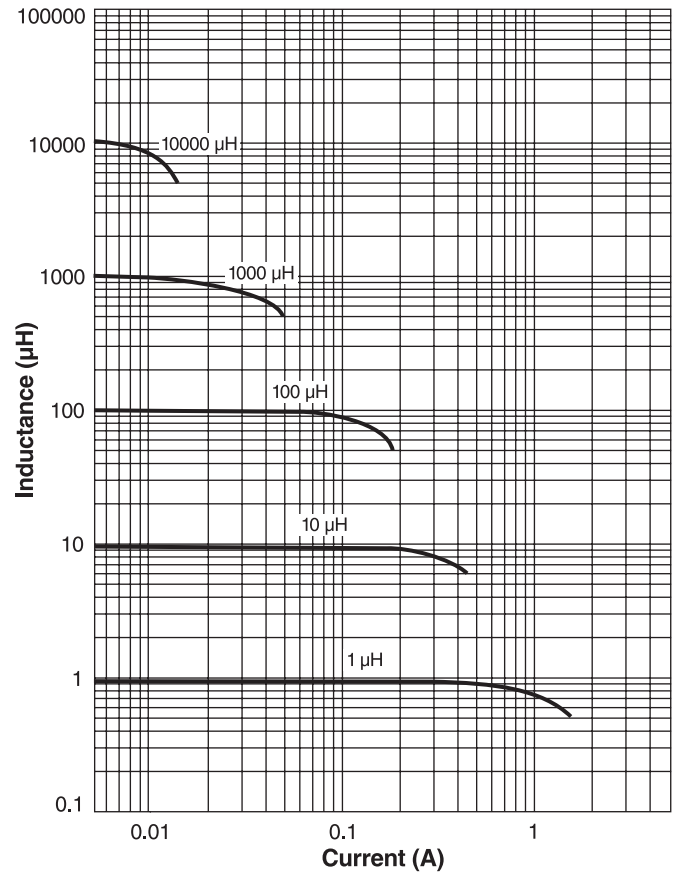


# SMT Power Inductors - DS1608 Series

## Typical L vs Frequency



## Typical L vs Current



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Please check our website for latest information. Document 186-2 Revised 10/31/03

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