



# Backlight Inductors - DS1608B Series



- Specially designed for demanding backlighting applications
- High breakdown voltage and very low DCR

**Designer's Kit C334** contains 3 of each value

**Core material** Ferrite

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Terminations** RoHS compliant gold over nickel over moly-manganese. Other terminations available at additional cost.

**Weight** 0.14 – 0.16 g

**Ambient temperature** –40°C to +85°C with Irms current, +85°C to +115°C with derated current

**Storage temperature** Component: –40°C to +115°C.  
Packaging: –55°C to +80°C

**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Mean Time Between Failures (MTBF)** 26,315,789 hours

**Packaging** 750/7" reel; 2500/3" reel Plastic tape: 12 mm wide, 0.28 mm thick, 4 mm pocket spacing, 3 mm pocket depth

**PCB washing** Only pure water or alcohol recommended

Part number <sup>1</sup>	L ±20% <sup>2</sup> (mH)	DCR max (Ohms)	Insulation core-winding (MOhms)	SRF typ (MHz)	Irms <sup>3</sup> (mA)
DS1608B-104ML_	0.10	0.95	>10	12	220
DS1608B-154ML_	0.15	1.4	>10	10	200
DS1608B-224ML_	0.22	1.7	>10	8	180
DS1608B-334ML_	0.33	2.2	>10	6	160
DS1608B-474ML_	0.47	3.8	>10	5	140
DS1608B-684ML_	0.68	4.9	>10	4	120
DS1608B-105ML_	1.0	9	>10	2	100
DS1608B-155ML_	1.5	11	>10	1	80
DS1608B-225ML_	2.2	19	>10	1	50
DS1608B-335ML_	3.3	24	>10	1	40
DS1608B-475ML_	4.7	30	>10	1	30
DS1608B-685ML_	6.8	56	>10	0.9	20
DS1608B-106ML_	10.0	74	>10	0.8	10

1. When ordering, please specify **termination** and **packaging** codes:

**DS1608B-106MLC**

**Termination:** L = RoHS compliant gold over nickel over moly-manganese  
**Special order:** T = RoHS tin-silver-copper (95.5/4/0.5)  
or S = non-RoHS tin-lead (63/37).

**Packaging:** C = 7" machine-ready reel. EIA-481 embossed plastic tape (750 parts per full reel).

B = Less than full reel. In tape, but not machine ready.  
To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel. EIA-481 embossed plastic tape (2500 parts per full reel).

2. Inductance tested at 0.1 Vrms, 100 kHz, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.

3. Current that causes a 30°C temperature rise from 25°C ambient.

4. Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**Coilcraft**<sup>®</sup>

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

Document 205-1 Revised 9/20/07

1102 Silver Lake Road Cary, Illinois 60013 **Phone** 847/639-6400 **Fax** 847/639-1469  
**E-mail** [info@coilcraft.com](mailto:info@coilcraft.com) **Web** <http://www.coilcraft.com>

© Coilcraft, Inc. 2007

**OMECON**

Raiffeisenstr. 12  
83607 Holzkirchen  
Germany

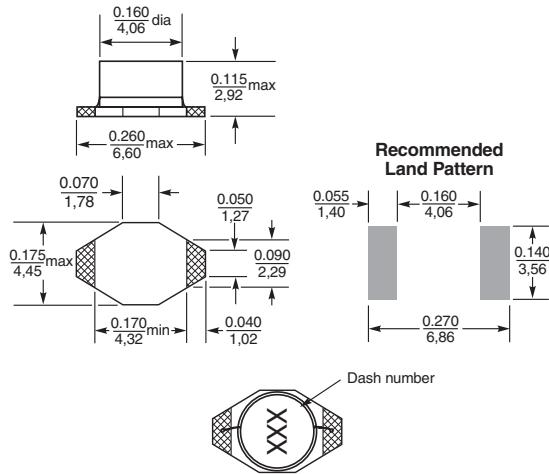
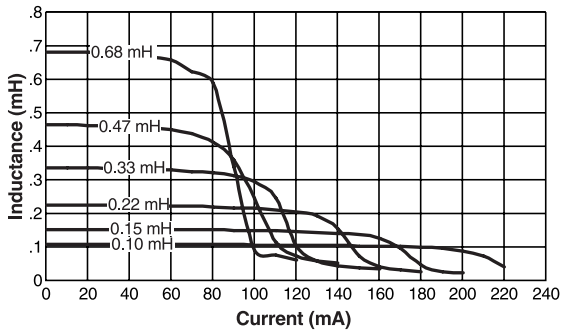
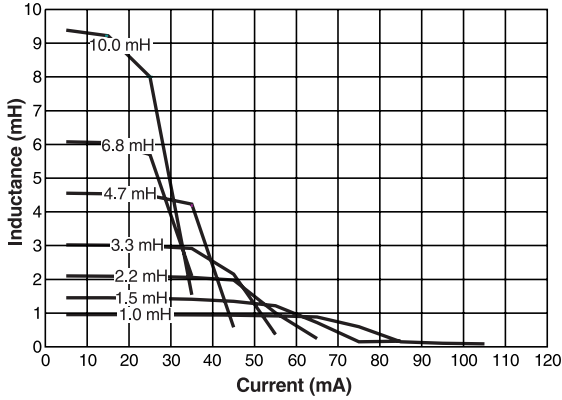
Tel.: +49(0) 8024 6408-0 Fax: -70  
[sales@omecon.com](mailto:sales@omecon.com)

[www.omecon.com](http://www.omecon.com)  
[www.DataSheet4U.com](http://www.DataSheet4U.com)



# Backlight Inductors - DS1608B Series

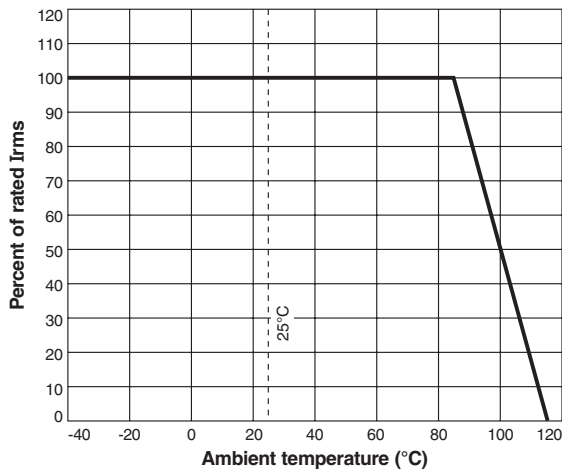
## Typical Inductance vs. Current



Part marking since Feb. 2005. Parts manufactured prior to that date may have color dots. Visit [www.coilcraft.com/colrpowr.cfm](http://www.coilcraft.com/colrpowr.cfm) for details.

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

## Irms Derating



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

Document 205-2 Revised 09/20/07

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469  
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

© Coilcraft, Inc. 2007



Raiffeisenstr. 12  
83607 Holzkirchen  
Germany

Tel.: +49(0) 8024 6408-0 Fax: -70  
sales@omecon.com  
www.omecon.com  
[www.DataSheet4U.com](http://www.DataSheet4U.com)