



# 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 electroplated gold (<50 μin) 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.

Tape and reel packaging: –40°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)

**Packaging** 750/7" reel; 2500/13" reel Plastic tape: 12 mm wide, 0.28 mm thick, 4 mm pocket spacing, 3 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

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

- 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). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

**B** = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

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

- Inductance tested at 0.1 Vrms, 100 kHz, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
- Current that causes a 30°C temperature rise from 25°C ambient.
- Electrical specifications at 25°C.

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



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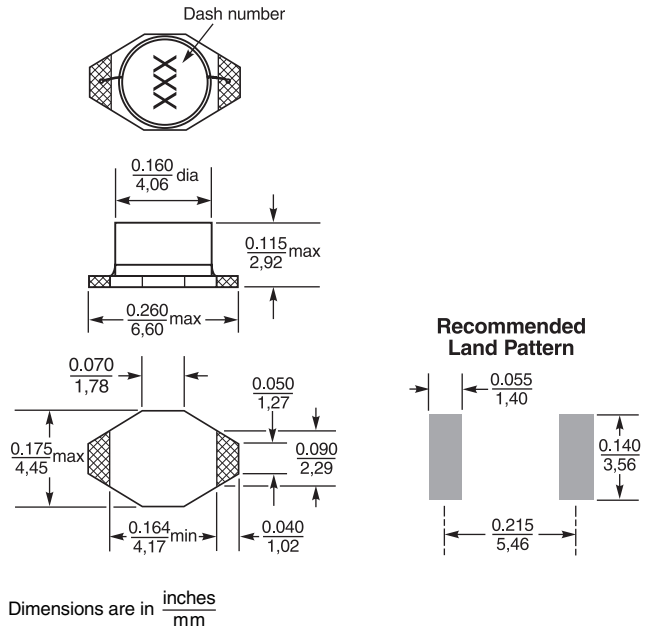
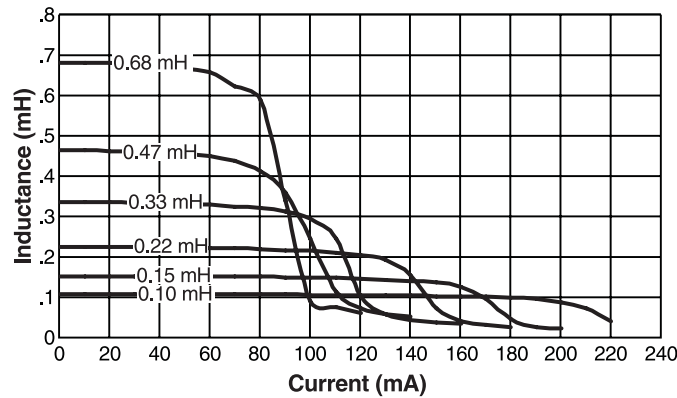
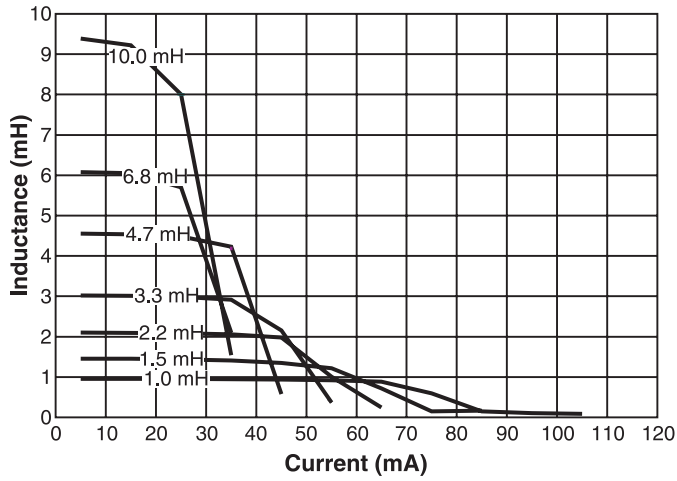
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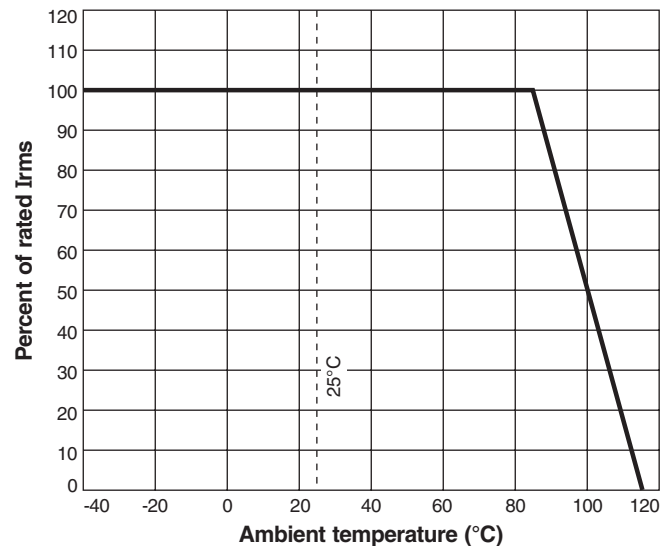
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## Typical Inductance vs. Current



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

## Irms Derating



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