



# 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)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**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

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.

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



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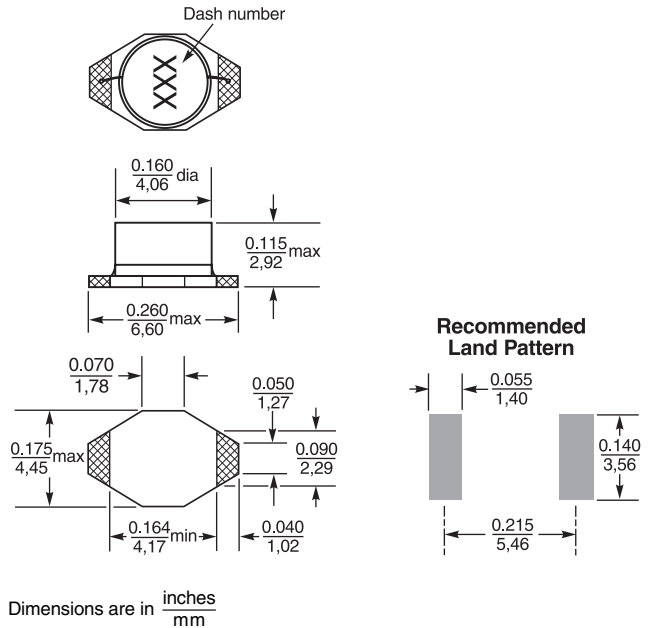
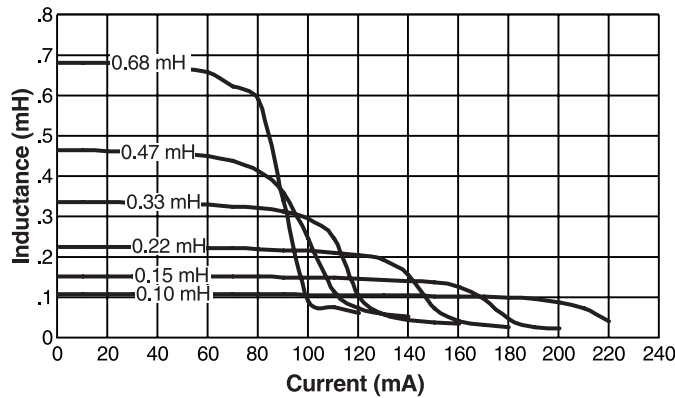
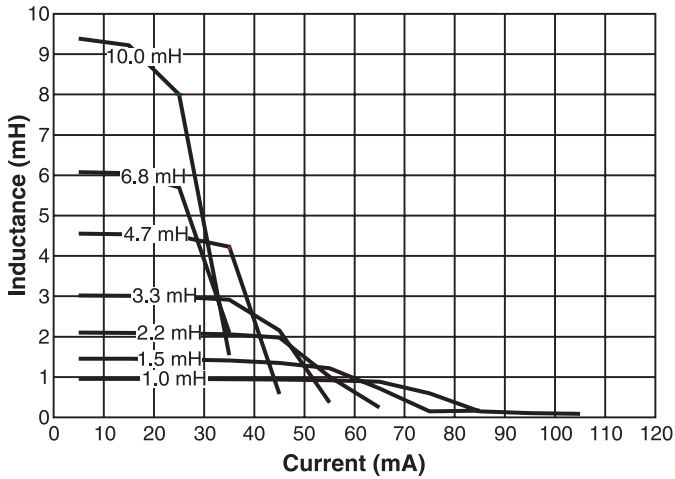
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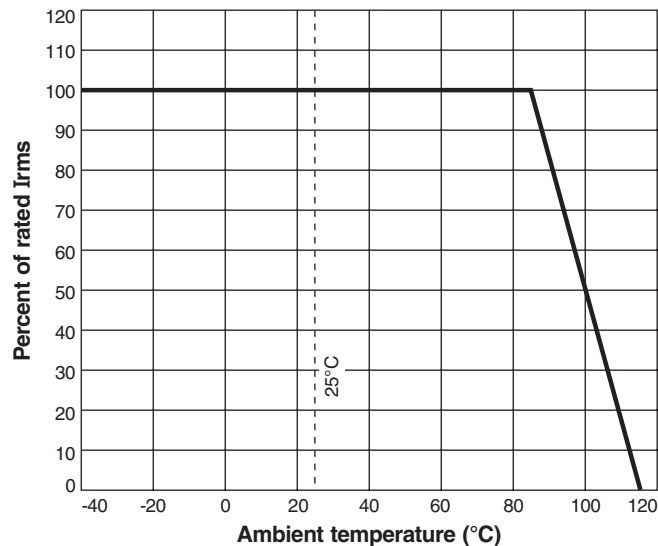


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## Typical Inductance vs. Current



## Irms Derating



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