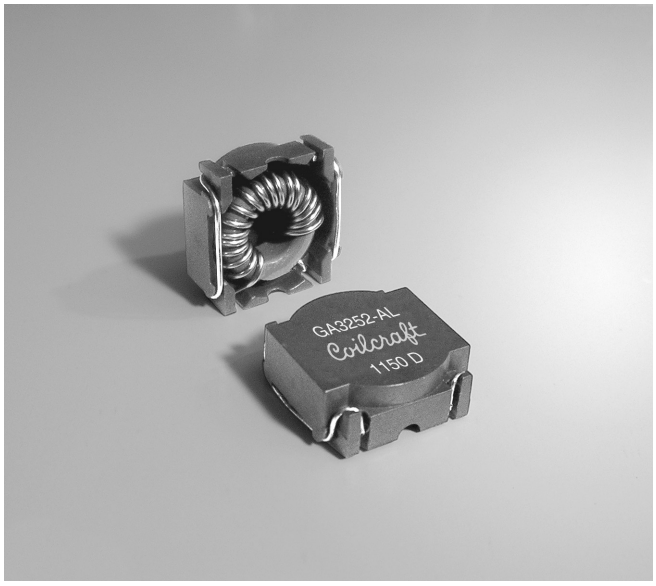
Power Inductor – GA3252-AL

For National Semiconductor LM3433 LED Driver



- High current surface mount toroidal power inductor
- Specified by National Semiconductor for 2 A to 14 A output applications

Core material Ferrite

Terminations RoHS compliant tin-silver (96.5/3.5) over copper. Other terminations available at additional cost.

Weight 11.6 g

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

Storage temperature Component: –40°C to +85°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 200 per 13″ reel Plastic tape: 44 mm wide, 0.5 mm thick, 32 mm pocket spacing, 10.4 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number[1]	Inductance[2] ±20% (µH)	DCR max[3] (Ohms)	SRF typ[4] (MHz)	Isat (A)[5] 10% drop	Isat (A)[5] 20% drop	Isat (A)[5] 30% drop	Irms (A)[6] 20°C rise	Irms (A)[6] 40°C rise
GA3252-AL_	12.0	0.017	20	6.5	8.0	13	6.5	10

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

GA3252-ALD

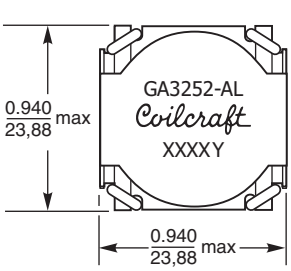
Termination: **L** = RoHS compliant tin-silver over copper. Special order: **T** = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).

Packaging: **D** = **13″ machine-ready reel** EIA-481 embossed plastic tape (200 per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).

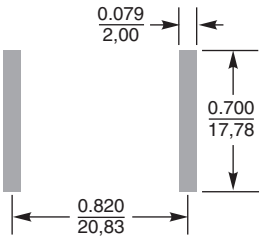
B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

2. Inductance tested at 100 kHz, 0.1 Vrms on Agilent/HP 4192A.
3. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
4. SRF measured on an Agilent/HP 8753ES network analyzer.
5. DC current at which the inductance drops the specified amount from its value without current.
6. Current that causes the specified temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.

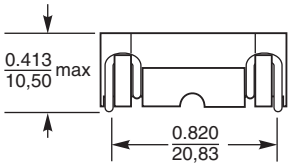
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

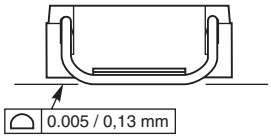


Parts manufactured prior to December 2011 may be marked differently.



Recommended Land Pattern





Dimensions are in inches / mm

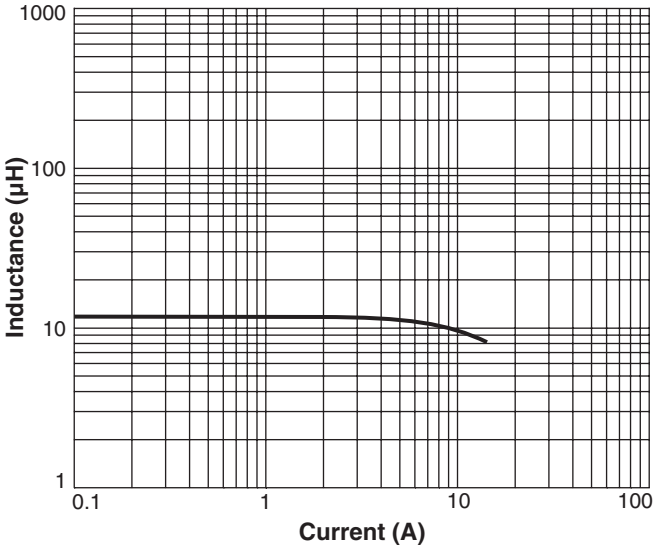
Coilcraft
www.coilcraft.com

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

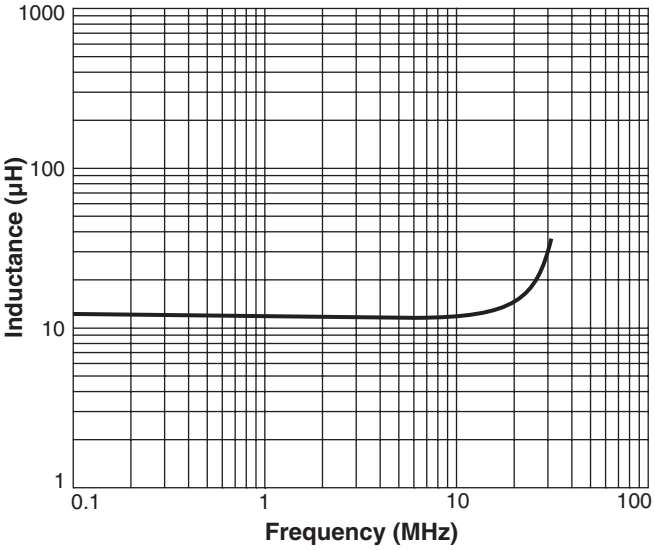
Document 636-1 Revised 12/16/11

Power Inductor – GA3252-AL

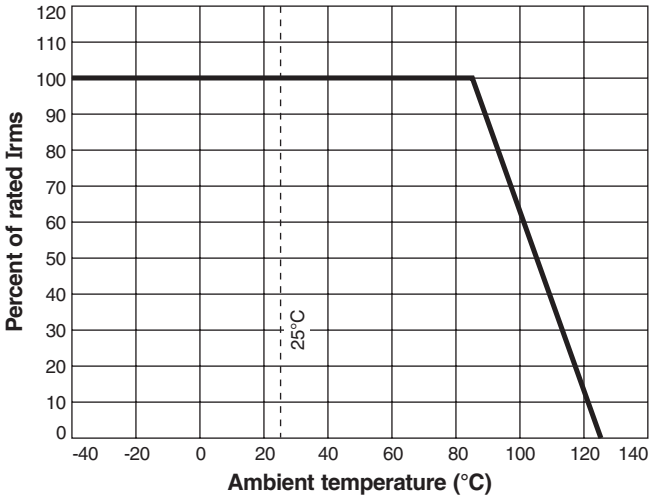
L vs Current



L vs Frequency



Irms Derating



Coilcraft®
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