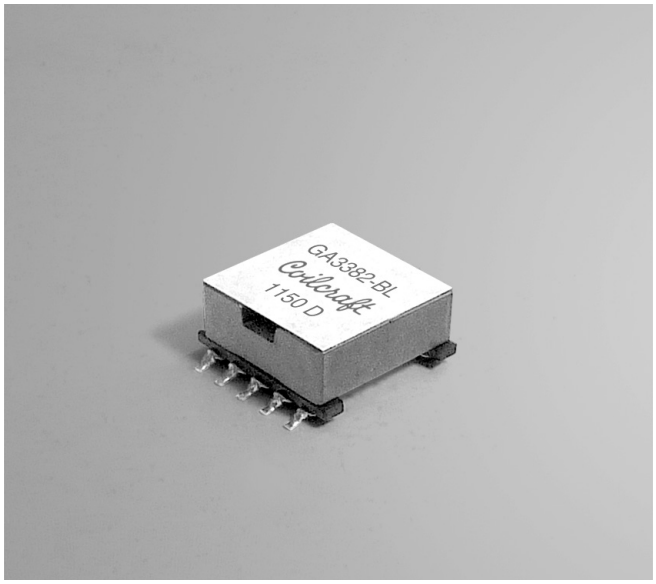
Power Inductor – GA3382-BL

For NSC LM25037 PWM Controller



- Designed for National Semiconductor LM25037 Dual Mode PWM Controller. Shown as L3 on Application Note AN-1861.
- 500 Vrms primary to bias and primary to core isolation
- Bias winding provides 10 Vdc to the circuit

Core material Ferrite

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

Weight 9.5 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 +125°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 175/13″ reel Plastic tape: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.5 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number[1]	Inductance[2] ±10% (µH)	DCR max (Ohm)[3] pri	DCR max (Ohm)[3] bias	SRF typ (MHz)	Isat (A)[4] 10% drop	Isat (A)[4] 20% drop	Isat (A)[4] 30% drop	Irms (A)[5] 20°C rise	Irms (A)[5] 40°C rise
GA3382-BL_	4.0	0.0095	0.36	30	16.0	17.0	18.0	6.5	8.5

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

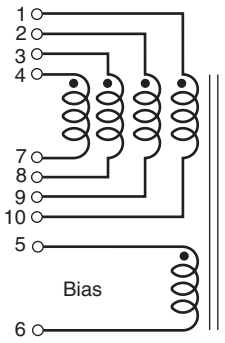
GA3382-BLD

Termination: **L** = RoHS compliant tin-silver (96.5/3.5) 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.
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter D instead.

2. Inductance measured at 250 kHz, 0.4 Vrms.
3. DCR for the primary is with the windings connected on parallel.
4. DC current at which inductance drops the specified amount from its value without current.
5. Current that causes the specified temperature rise from 25°C ambient.
6. Electrical specifications at 25°C.

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



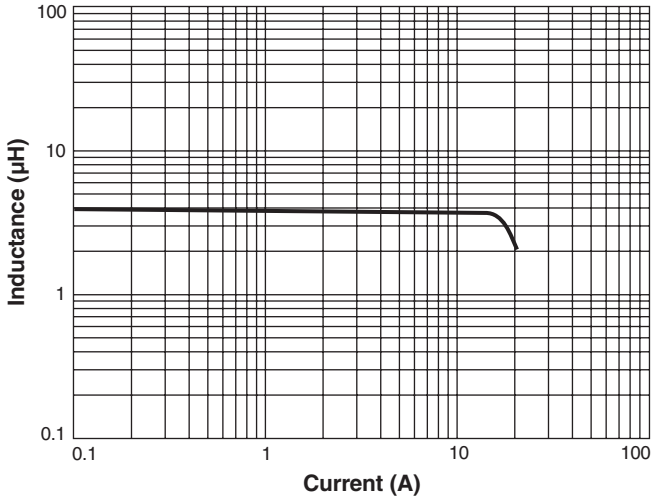
Primary windings to be connected in parallel on the PC board

Coilcraft
www.coilcraft.com

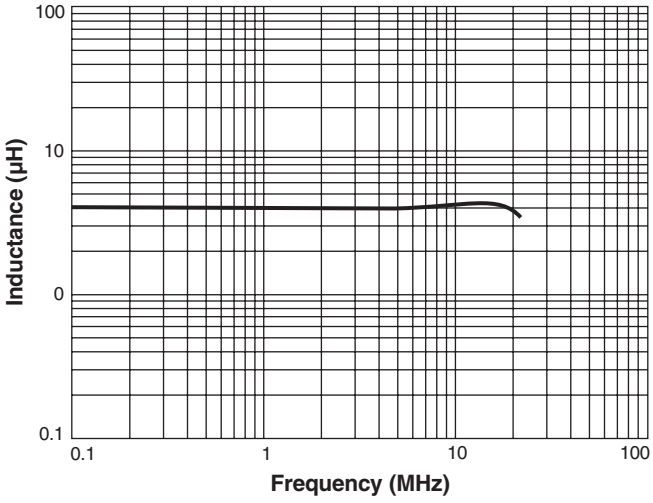
US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Power Inductor – GA3382-BL

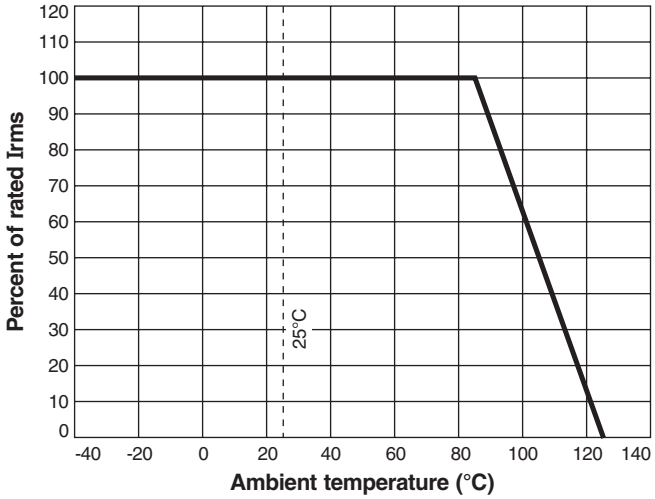
Inductance vs Current

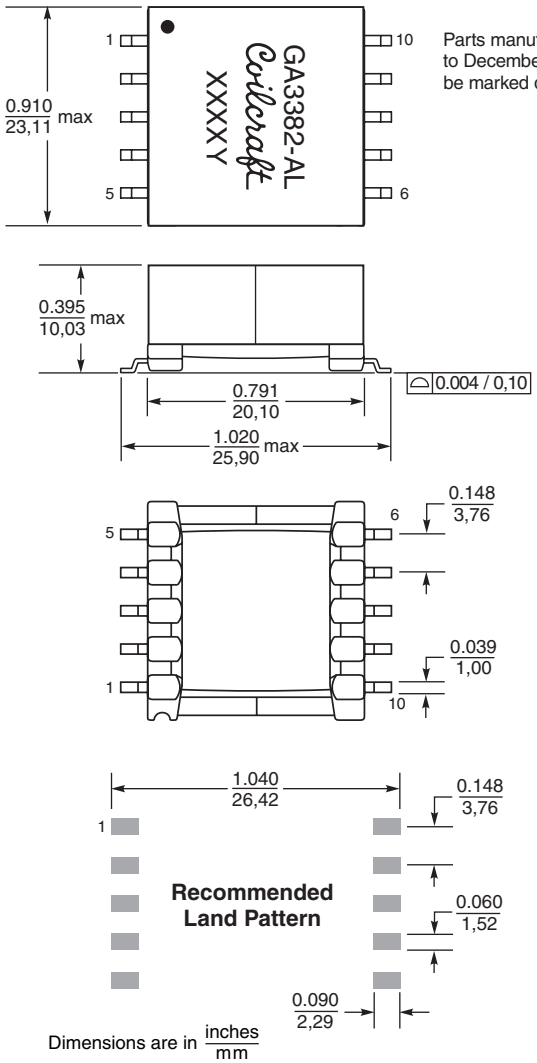


Inductance vs Frequency



Irms Derating





Parts manufactured prior to December 2011 may be marked differently.

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 690-2 Revised 09/05/08