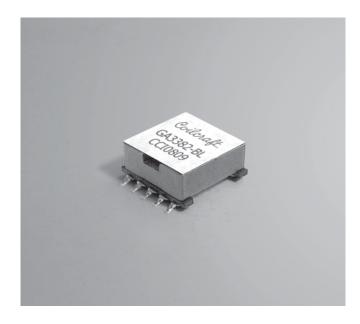


# Power Inductor – GA3382-BL For NSC LM25037 PWM Controller



- 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 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.

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 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 <sup>1</sup>	Inductance <sup>2</sup> ±10% (µH)	DCR max (Ohm)3		SRF typ	Isat (A) <sup>4</sup>			Irms (A) <sup>5</sup>	
		pri	bias	(MHz)	10% drop	20% drop	30% drop	20°C rise	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-B L D

**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).

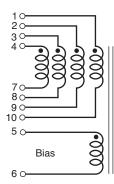
**D** = 13" machine-ready reel. EIA-481 embossed plastic tape. Packaging:

**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



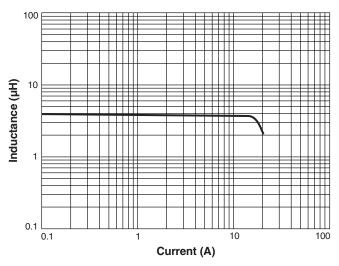
Specifications subject to change without notice. Please check our website for latest information.

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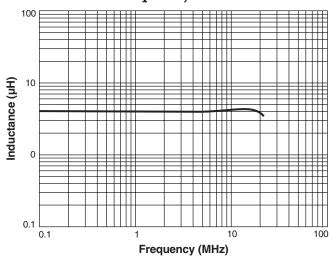


# Power Inductor — GA3382-BL

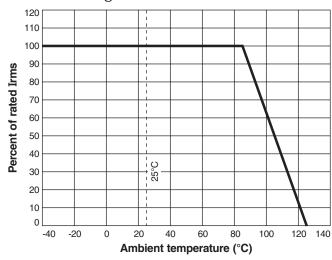
# **Inductance vs Current**



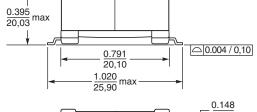
# **Inductance vs Frequency**

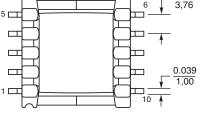


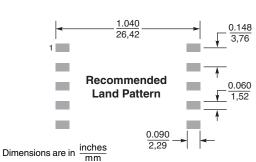
## **Irms Derating**













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