

**NEW!**

Dual Inductor for Class D – GA3416-CL



- Dual inductor for use in Class D output filter
- Designed for low distortion and the best sound quality
- Shielded surface mount package contains both coils
- Additional mounting pads for excellent board adhesion

Core material Ferrite

Terminations RoHS compliant tin-silver over copper (leads), gold over nickel over phos bronze (additional mounting pads). Other terminations available at additional cost.

Weight 7.8 g

Ambient temperature –40°C to +125°C with Irms current, +125°C to +165°C with derated current

Storage temperature Component: –40°C to +165°C.
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 200/13" reel Plastic tape: 32 mm wide, 0.4 mm thick, 20 mm pocket spacing, 12.45 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	Maximum power (W) ²		Inductance ³ ±10% (µH)	DCR max ⁴ (Ohms)	SRF typ ⁵ (MHz)	THD+N ⁶ (%)	Isat (A) ⁷			Irms (A) ⁸	
	2 Ohm load	4 Ohm load					10% drop	20% drop	30% drop	20°C rise	40°C rise
GA3416-CL_	28	60	10.0	0.021	23.6	<0.1	9.1	9.3	9.5	3.0	4.3

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

GA3416-CL D

Termination: L = RoHS compliant tin-silver over copper (leads), gold over nickel over phos bronze (additional mounting pads).
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 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 D instead.

- Maximum power into specified load that causes a 40°C temperature rise. Measured at 1 kHz with a 14.4 Vdc supply for the 2-Ohm load and a 21 Vdc supply for the 4-Ohm load. Refer to Output Power table for typical output conditions. Tested using the TAS5414A Evaluation Board from Texas Instruments.
 - Inductance measured at 500 kHz, 0.5 Vrms, 0 Adc using an Agilent/HP 4284A impedance analyzer.
 - DCR measured on a micro-ohmmeter.
 - SRF measured using Agilent/HP 8753D network analyzer.
 - Total harmonic distortion + noise measured at 23 W into a 2-Ohm or 4-Ohm load at 1 kHz with a 21 Vdc supply.
 - DC current at which the inductance drops the specified amount from its value without current.
 - Current applied to windings connected in series that causes the specified temperature rise from 25°C ambient.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Output Power

Power typ (W)	Temperature rise from 25°C (°C)	Test condition		
		Load	THD+N	Test condition
21	17.0	4 Ohm	1%	1 kHz, 14.4 Vdc
25	20.0	4 Ohm	10%	1 kHz, 14.4 Vdc
44	30.7	4 Ohm	1%	1 kHz, 21 Vdc
54	35.0	4 Ohm	10%	1 kHz, 21 Vdc
33	46.5	2 Ohm	1%	1 kHz, 14.4 Vdc
40	51.6	2 Ohm	10%	1 kHz, 14.4 Vdc

Coilcraft®

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

Document 667-1 Revised 09/25/09

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

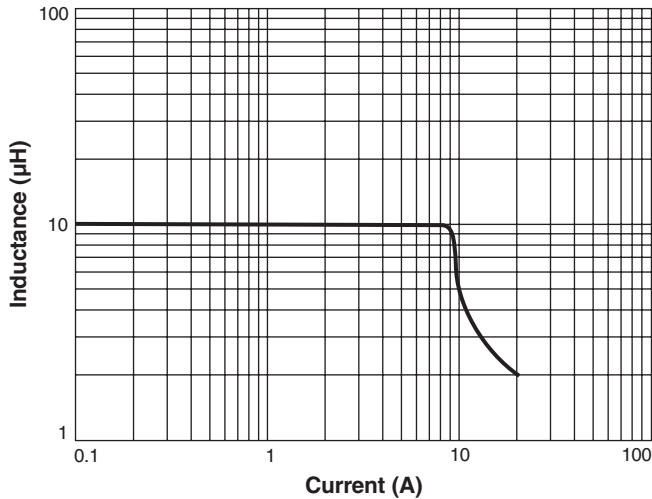
E-mail info@coilcraft.com Web <http://www.coilcraft.com>



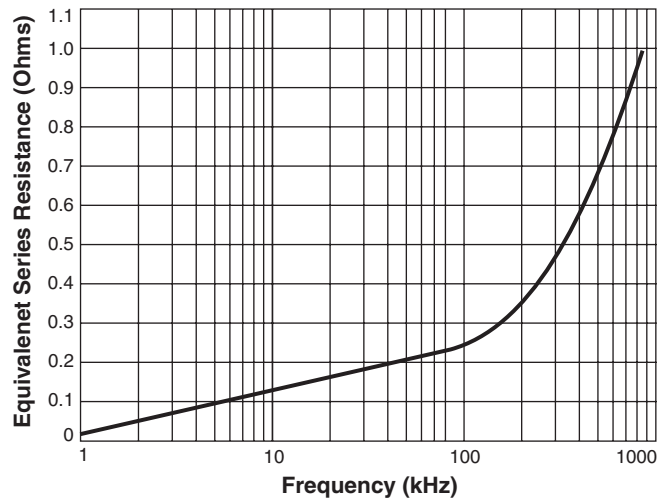
NEW!

Class D Dual Inductor – GA3416-CL

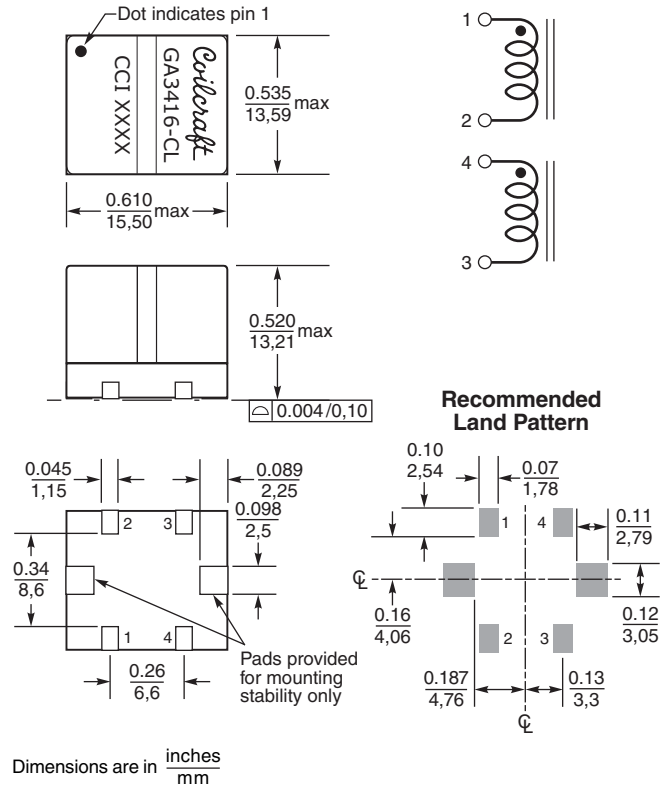
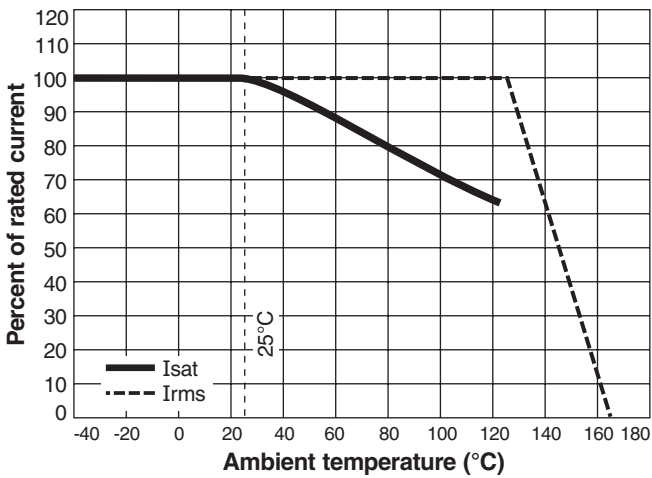
L vs Current



ESR vs Frequency



Current Derating



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

Document 667-2 Revised 09/29/09

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web <http://www.coilcraft.com>