

DI2220V301R-10 is a surface mount, high current power inductor (in the industry's smallest package) with exceptional performance under DC Bias. Very low DCR provides superior thermal performance under DC bias. This compact, monolithic component produces flat inductance over the driven current range (from 3 to 8 amps) comparable to a larger, heavier, wire-wound toroidal inductor.

## Features:

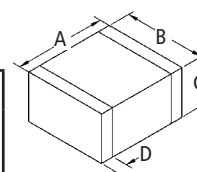
Low Profile (height is 3.61 mm / 0.142") • EMI resistant, fully shielded printed coil • Small footprint (one fourth the footprint of an equivalent performance, old style, wire wound inductor assembly) • Superior performance under DC Bias • Rugged, vibration resistant monolithic construction • Maximum performance at 8 amps will yield > 250nH • Distributed power multiphase DC-DC converters that use Laird Technologies' new power inductor can operate faster, cooler and cleaner • New high performance, multiphase designs (with the new power inductor) require significantly less total pc board space and usually have lower system cost

## Applications:

• Power inductor for DC-DC Converter • Specifically tuned to work with the new generation of high frequency multiphase DC-DC converters • Mounting can be on back side of pc boards • Applications with Voltage Regulator Modules

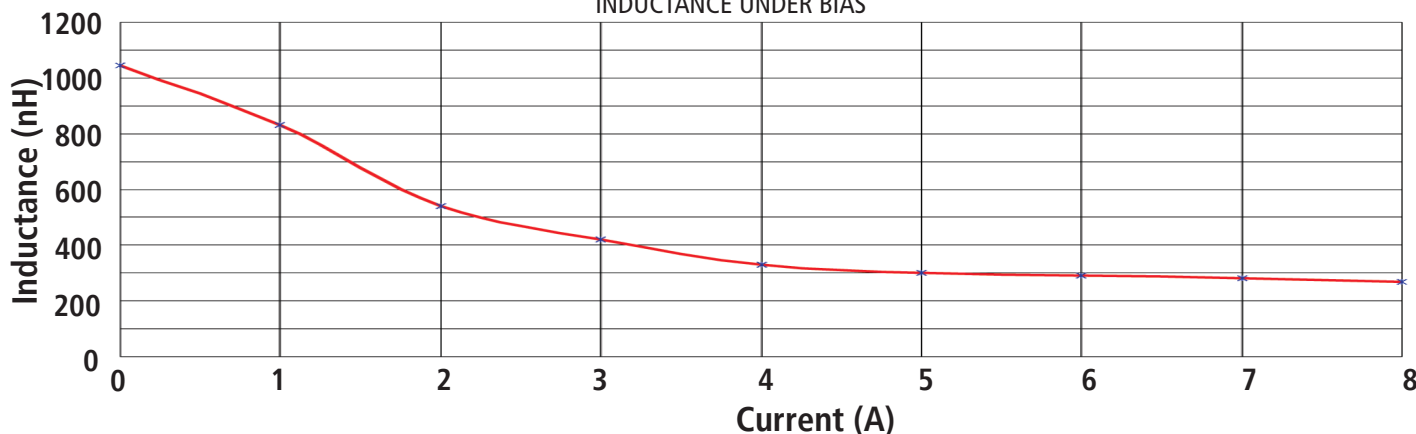
## PART NUMBERING SYSTEM EXAMPLE

DI	2220	V	301	R	-10
Product Series Code	Part Size Code	Rated Continuous Current Code	Inductance Value Code	Packaging Code	Additional Description

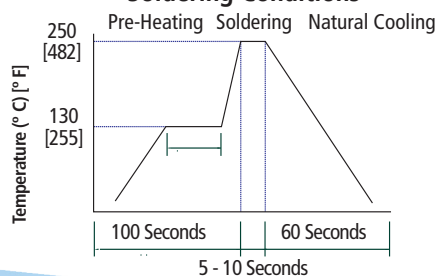


PART NUMBER	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	L @ 2 MHz TYPICAL nH (± 10%)		DCR MAX (Ohms)	RATED I MAX (continuous) mA
					5 AMPS	8 AMPS		
DI2220V301R-10	5.59 (0.220)	5.08 (0.200)	3.61 (0.142)	0.76 (0.030)	300	270	0.010	8000

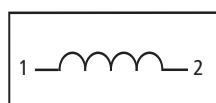
**DI2220V301R-10**  
INDUCTANCE UNDER BIAS



### Recommended Lead Free Soldering Conditions



### Equivalent Circuit



### Land Pattern

