

The 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. Stable performance.

## **Features:**

Low Profile (height is 3.61mm / 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 this 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
Power supply bricks

## PART NUMBERING SYSTEM EXAMPLE

DI	<u>2220</u>	V	<u>301</u>	<u>R</u>	<u>-10</u>	A B
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	RATED I MAX
					5 AMPS	8 AMPS	(Ohms)	(continuous) mA
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 Monolithic Power Chip Inductor

