



PRESS RELEASE

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Low Loss, High Saturation SMT Power Inductor from Focus EDL

Leading electronic components distributor, Focus EDL, announces the PG0702NL series of flat-coil surface mount (SMT) power inductors. Manufactured by Pulse, these inductors have a low DCR of 0.89 to 5.9 mΩ and a tight tolerance of $\pm 6\%$ for higher efficiency. Inductance values range from 0.40 to 3.0 μH with a peak saturation of 15 to 45A. Operating frequency is 100kHz to 1MHz at an operating temperature of minus 40 to 130° Celsius with no thermal derating. Inductors like these are used to store energy and serve as filters in voltage regulator modules (VRMs) used in notebooks, desktop computers, workstations, and servers as well as dc/dc applications, point-of-load (POL) converters, and other high-density, high-power, high-ambient temperature applications.

Pulse's PG0702NL series inductors use a ferrite core material which has one tenth the core loss of iron powder or iron alloy core materials. The lower core loss of the ferrite material is optimised at frequencies above 500 kHz. The decrease in core loss significantly increases system efficiency five to ten percent. Because the ferrite material is immune to thermal aging, these inductors are reliable at higher operating temperatures.

The PG0702NL series has a self-leaded, round, wire coil which lowers the overall cost of the finished product, providing a lower tolerance of the direct current resistance (DCR) to plus or minus six percent. The tight DCR tolerance improves current sensing control and the power supply's regulation and transient response.

Pulse's PG0702NL inductors have an industry standard 4040 footprint of 10.8 x 9.5 x 8mm and incorporate a three-pin design for improved mechanical stability. An unconnected third pin at the back of the inductor distributes the part's weight and balance between the three terminals during the mechanical vibration.