

High-frequency multilayer inductor series with world's highest inductance value

August 31 2012



TDK Corporation expanded its MLG0402Q series of high-frequency multilayer inductors with new types that achieve inductance values of up to 33 nH, the world's highest for a tiny 0402 inductor (EIA). With the development of these new components, the TDK MLG0402Q series now includes a total of 55 types with inductance values ranging from 0.2 nH to 33 nH, rated currents from 120 mA to 350 mA, and typical DC resistance values from 0.03 Ω to 2.71 Ω . Mass production began in August 2012.

To raise the inductance, TDK optimized the coil pattern design of its multilayer inductors and employed improved materials and process technologies to create a greater number of layers that are even thinner than in existing products. As a result, four new products have been added

to the series, raising the maximum inductance from 15 nH to 33 nH.

The new components are particularly well suited for used in the high-frequency circuits of mobile devices such as smartphones and conventional mobile phones. Thanks to the wide operating temperature range from -55 °C to +125 °C, the MLG0402Q series is also ideal for use in the high-frequency circuits of other devices such as [Bluetooth devices](#) and cordless phones.

Source: TDK Corporation

Citation: High-frequency multilayer inductor series with world's highest inductance value (2012, August 31) retrieved 13 April 2024 from <https://phys.org/news/2012-08-high-frequency-multilayer-inductor-series-world.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.