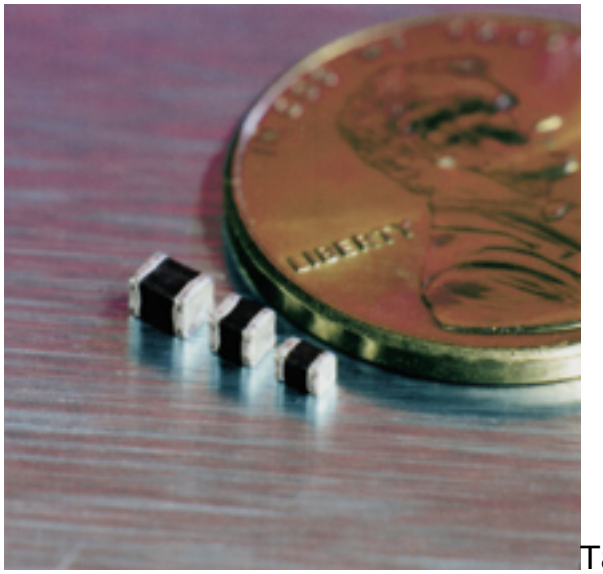
Wire Wound Chip Inductors



Taiyo Yuden (U.S.A.) announced a new line of wire wound chip inductors &#151 the LQ Series. Designed for use in power supply circuits in laptop computers, cell phones, PDA equipment, and digital cameras, they provide low DC resistance characteristics to reduce heat generation and power loss. Their high current ratings and small form factor also allow higher component mounting density. The series consists of 39 separate model numbers in 0805, 0806 and 1007 EIA case sizes offering inductance values from 1 - 1000 &#956H.

LQ Series Inductors are designed with a &quotzero dead space&quot structure that uses the core ends as the external electrode, permitting the use of thicker windings and a larger ferrite core. This design reduces DC resistance, increases current ratings, and facilitates miniaturization. Ferrite powder, added to the exterior resin coating of the device, provides magnetic shielding to reduce cross-talk interference. The component's five-sided electrode and non-directional structure enable high-speed mounting.

The 39 available models in standard EIA case sizes include: seven models in 0805 (LB 2012 Type); 13 models in 0806 (LB 2016 Type); and 19 models in 1007 (LB 2518 Type). Inductance ranges go from 1 - 100 &#956H in the 0805 and 0806 case size components, and from 1 - 1000 &#956H in the 1007 size components. LQ Series components offer current ratings from 15 - 500mA, Rdc values as low as 0.06 Ohms and a typical Q Value of 10.0 (some 0805 components offer a Q of 5).

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