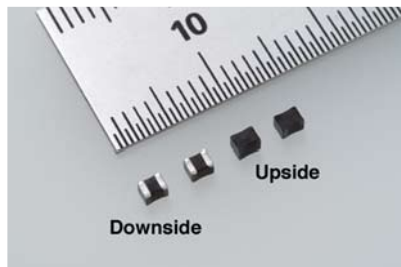


June 20, 2005

Taiyo Yuden:
Announcing World's Smallest Wire Wound Chip Inductor for Signal Lines
Chip Surface Area Reduced by 36% Compared to Equivalent Products



Taiyo Yuden has developed the world's smallest wire wound chip inductor for signal lines, the LBM2016 (EIA0806, 2.0 x 1.6 x 1.6mm), and commenced mass production in June 2005.

Taiyo Yuden has been engaged in the development of choke coils for DC-DC converters, or wire wound chip inductors for an IC's input power circuit, and those inductors are being increasingly designed in mobile digital equipment. The LBM2016 was developed by adapting this technology for signal line inductors. It utilizes a unique structure, which was independently developed by Taiyo Yuden, that completely eliminates all wasted space to achieve the compact size. In comparison with products of equivalent characteristics, it achieves a 36% reduction in surface area, and a 43% reduction in volume, to become the world's smallest wire wound chip inductor for signal lines.

In general, electronic circuits such as signal lines require filters to select out specific signals. The filter is a circuit consisting of an inductor and a capacitor. In this case, the inductor needs to have a higher Q factor than power inductors, and a narrower inductance tolerance. Moreover, since it will be used over a wide range of frequencies, a product line-up featuring a wide variation in inductance is also required.

Taiyo Yuden applied its technology derived from the development of wire wound chip power inductors to obtain a compact chip size while retaining the same high Q factor and narrow inductance tolerance of previous signal line inductors. Furthermore, the company optimized the material compound ratios of the outer covering, and the shape of the ferrite core, to obtain a full line-up of 15 different items with inductance values ranging from 1_H up to 100_H

This new product, LBM2016 is optimum for filter applications in signal lines for a large variety of devices. It exhibits particular advantages for compact utilization in televisions, audio equipment, set top boxes, and other AV equipment where a large number of signal lines and the corresponding signal inductors are used. Utilization can also be expected in flat-screen televisions, a market that is growing rapidly.

Mass production of the LBM2016 commenced in June 2005 at the Nakanajo Plant in Gunma Prefecture, Japan, with a production capacity of 3 million units per month, which is planned to expand to 10 million units per month within a year. Sample price is 20 yen per unit.

The New Wire Wound Chip Inductor LBM2016 Specifications for 6 Items (out of 15 in all)

	Inductance [μ H]	Q (min.)	Self-Resonant Frequency [MHz] (min.)	DC Resistance [Ω] (max.)	Rated current [mA] (max.)
LBM2016T1R0J	1.0 \pm 5%	30	220	1.1	245
LBM2016T4R7J	4.7 \pm 5%	30	40	2.3	175
LBM2016T100J	10 \pm 5%	25	27	3.5	155
LBM2016T150J	15 \pm 5%	25	20	4.4	140
LBM2016T470J	47 \pm 5%	20	13	11.1	80
LBM2016T101J	100 \pm 5%	15	9	21.0	60