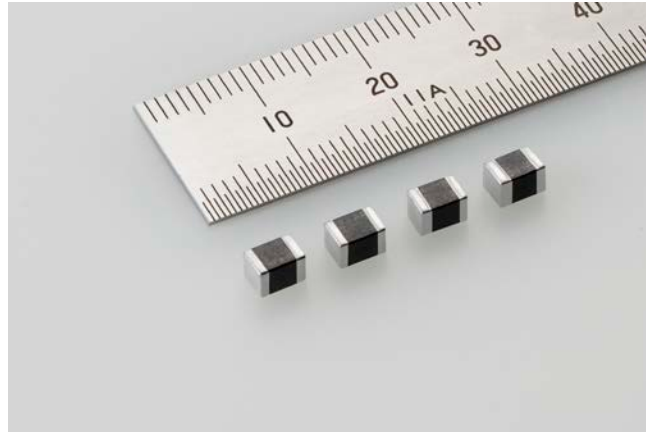


For Immediate Release

TAIYO YUDEN Announces New Proposal for Chip Bead Inductors in Power Lines for LED Lighting

*Enabling noise suppression in smaller and lighter power supplies
with frequencies from 10 MHz to 100 MHz*



TOKYO, November 22, 2016—TAIYO YUDEN CO., LTD. has announced today the expansion of its line-up for its chip bead inductor FB series M type and the commercialization of FBMH4532MM182PT (4.5 x 3.2 x 3.2 mm).

The product is a noise suppression component for power-supply lines that carry a large current, such as AC-DC converters for home LED lighting.

The FB series M type chip bead inductors adopt our unique internal structure, which is optimized to have an impedance peak in the frequency range between 10–100 MHz. Impedance is 1,800 Ω at a frequency of 10 MHz and 10,000 Ω at a frequency of 30 MHz (values obtained under our reference measurement conditions). This chip bead inductor is our new proposal for suppressing noise in power-supply lines at a frequency range from 10–100 MHz, which is a disadvantage seen with conventional inductors.

Production of the product began at the company's Nakanojo Plant (Nakanojo-machi, Agatsuma-gun, Gunma Prefecture, Japan) in October 2016 at a rate of one million units per month. The sample price is 30 yen per unit.

Technology Background

There has been a recent rapid increase in the switch from conventional lighting to LED lighting in order to save energy. LED lighting driven by a DC power supply integrates an AC-DC converter, which converts input AC power to DC power. Since lighting fixtures place importance on design and style, needs for smaller and lighter converters have been increasing.

TAIYO YUDEN has optimized the internal structure of the FB series M type inductors used to suppress noise at frequencies of 100 MHz or higher, for the frequency range between 10–100 MHz, and has commercialized FBMH4532MM182PT, which can reduce noise in this range—a disadvantage seen with conventional inductors. To suppress noise in this frequency range, AC line filters or common mode choke coils have traditionally been used. Our new inductors offer a solution for reducing size and weight in AC-DC converters.

TAIYO YUDEN focuses on product development that meets market needs and will continue to expand its product line-up to achieve higher rated current and reliability.

■ Applications

For noise suppression in power-supply lines that carry a large current such as AC-DC converters for home LED lighting

Characteristics of this chip bead inductor are as shown below.

Part number	Nominal impedance [Ω]	Impedance tolerance	Measuring frequency	DC Resistance [Ω] (max.).	Rated current [A] (max.).
FBMH4532MM182PT	1,800	$\pm 30\%$	10MHz	0.8	0.7