

Taiyo Yuden: Industry's Smallest Wire-Wound Common Mode Choke Coil for HDMI Goes on Sale

—Improved High Frequency Characteristics, Optimum for Common Mode Noise Countermeasures in High-Speed Interface—

Taiyo Yuden Co., Ltd. announces sale of a compact wire-wound common mode choke coil, "CM01H900" (1.2 x 1.0 x 0.9mm, height is maximum value), optimum for interfaces using high-speed differential signal transmission such as HDMI. This wire-wound common mode choke coil for HDMI is the smallest in the industry.

Such HDMI interfaces are widely used in flat televisions, Blu-ray disc recorders, High Definition DVD recorders, and other high-definition quality digital imaging equipment, as well as in personal computer video output interfaces. There is a need for common mode choke coils with superior high-frequency characteristics to eliminate the common mode noise that occurs in the high-speed differential signal transmission lines used in these types of interfaces. Compact common mode choke coils are also used in the compact HDMI terminals mounted in the digital video cameras with high-definition imaging capability that are now coming onto the market.

In response, Taiyo Yuden utilized its compact wire-wound chip inductor design technology and production technology to develop the "CM01H900" and achieve the industry's smallest wire-wound common mode choke coil for HDMI, with a 1210 (1.2mm x 1.0mm) size. Moreover, the compact size also served to further enhance the wire-wound common mode choke coil's high-frequency characteristics, achieving a cut-off frequency of 8 gigahertz (Reference: Giga equals 1 billion). In addition to use in compact mobile devices' HDMI terminals, it can also be used for common mode noise countermeasures in the even faster ultra high-speed interfaces that are upcoming.

Mass production is scheduled to start at the Nakanojo Plant (in Nakanojo-machi, Agatsuma-gun, Gunma-ken) in April 2008, with monthly production to reach 15 million units by the end of the year. The sample price is 20 yen per unit.

This product will be on display at the Taiyo Yuden booth for TECHNO-FRONTIER 2008, to be held starting April 16 at Makuhari Messe (Mihama-ku, Chiba city).

CM01H900 Features

Ordering code	Common mode impedance [Ω at 100MHz]	DC resistance [Ω]	Rated current [mA]	Rated voltage [V]	Insulation resistance [MΩ]	Cut-off frequency [GHz]	Characteristic impedance [Ω]
CM01H900	65min (90 typ.)	0.5 max	250 max	20 max	100 min	8.0 typ.	100 typ.