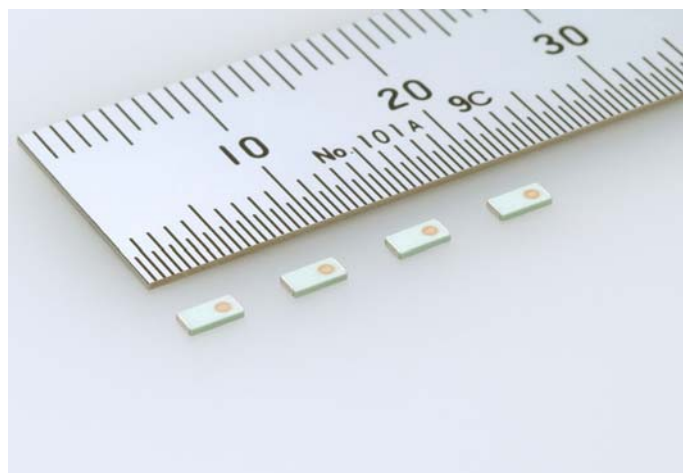


For immediate release

## **Taiyo Yuden Introduces Industry's Smallest GPS Antenna**

*EIA 1206 Size, 0.5mm Thick;*

*87% Smaller Volume, 69% Lower Profile*



TOKYO, September 15 2009 — Taiyo Yuden Co., Ltd. announced plans today to release the smallest GPS antenna in the industry. Like the rest of Taiyo Yuden's RadiEdge antenna lineup, the new product is designed to improve the flexibility of antenna placement. Most mobile phones, smartphones and portable navigation devices (PNDs) today are GPS-ready. Targeting this market, the new AH316M157501 measures only 3.2 x 1.6 x 0.5 mm, approximately 87% smaller in volume and 69% shorter in height than the company's previous GPS antenna, the AF816M157502 (8.0 x 1.6 x 1.6 mm). Taiyo Yuden technology has made possible a compact antenna design that will help GPS-ready mobile phones become even smaller and slimmer in the future.

Mass production of the new product will begin in October 2009 at the company's Tamamura Plant in Gunma Prefecture, Japan, at a pace of 3 million units per month. The price for samples is 300 yen per unit.

### **Technology Background**

Today, many mobile phones and smartphones come with GPS features such as positioning and navigation. There is even a service that allows parents to track their kids using GPS phones. In the arena of car navigation systems, features and dimensions have been slashed to develop removable or mobile PNDs. Such slimmer mobile GPS devices require the antennas to be equally small and slim. These hand-operated devices are also subject to weak reception depending on the position of the fingers or hand, which can interfere with the radio waves. All these challenges call for designs that enable optimal placement of the antenna.

While Taiyo Yuden had previously offered the compact chip antenna AF816M157502, which

could be mounted at the corner of a substrate for GPS-ready devices, demand for even slimmer, more compact units led the company to use its advanced design technology to optimize the elements, high-frequency components, and materials. While maintaining the characteristics of the GPS antenna, the company was able to develop a smaller, lower profile, EIA 1206 size antenna only 0.5mm thick. This, in turn, enhanced the flexibility of antenna placement, which is one of the leading features of RadiEdge antennas.

The new product will be on display at the Taiyo Yuden's booth at CEATEC JAPAN 2009, which starts October 6 at Makuhari Messe (Mihama-ku, Chiba City).