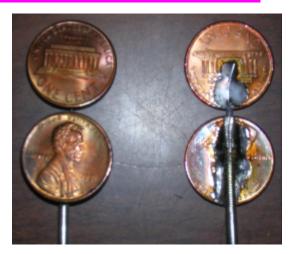
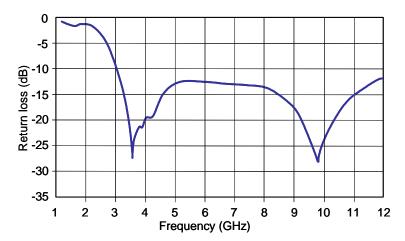
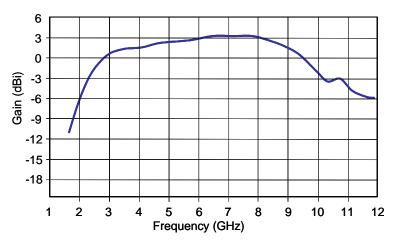
## The PUBs Two-cent Antenna Solution

UWB antennas need not be complex or expensive as shown in the example on the right (suggested by Prof. Jack Lang, constructed and measured by Dr. Hans Schantz). Although US cents are shown, discs similar in size (19 mm diameter and 0.7 mm thickness) such as the Euro 2-cent piece may also be employed. (Of course, the Euro dipole design would be a fourcent solution). The diameter affects the lower bandwidth frequency, while the thickness and gap spacing between the two elements affects the match.







For a more complete analysis please see: H. G. Schantz, "Planar Elliptical Element Ultra-Wideband Dipole Antennas," Proceedings of the 2002 IEEE APS/URS Conference, San Antonio, TX, 16-21 June 2002.

Variations on this theme are in Patent Application "Ultra Wideband Antenna" PCT/GB2003 /005070 filed Nov. 2003. [You can use the variations, if the patent issues, for non-commercial and academic work, providing that any IPR is acknowledged and any changes or improvements are reported back to Artimi Ltd under Reasonable and Non-Discriminatory, Zeroroyalty (RAND-Z) terms.]

Copyright permission is

granted for non-commercial academic reproduction of any or all parts of this page, please cited: "Used with permission, PUBs, http://timederivative.com/pubs.html" rev-2: 29 April 2004.