

Abstract

Ultra-wideband monopole antenna

An ultra-wideband antenna is disclosed. The antenna comprises a substrate and a conductive ground plane formed on a first surface of the substrate. A radiating element is formed on a surface of the substrate. The radiating element has a peripheral shape that includes a plurality of regions each being a segment of an ellipse. The antenna further includes a feed element to transmit a signal to the radiating element. The radiating element is generally symmetrical about an axis that passes through the feed line in the y -direction. The shape of the radiating element has a resemblance to the body of a guitar. That is, it has two or more bulbous regions, that closer to the feed line being of a lesser width in the x -direction than that further from the feed line. Some embodiments of the invention have a slot formed in the radiating element.

[Fig. 1a]



162162



G00002