A LOW VSWR UWB MICROSTRIP ANTENNA BASED ON CIRCULAR PATCH TOPOLOGY WITH PARTIAL GROUND PLANE

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ABSTRACT

Ultra Wideband (UWB) Microstrip Antenna consisting of a circular monopole patch with 10dB return loss bandwidth from 4.42 to 7.72 GHz and with a maximum VSWR = 1.19 is proposed. This antenna has been designed on FR4 printed circuit board (PCB) with overall size of 32 × 32 × 0.8 mm^3 and dielectric substrate εr = 4.7. This antenna operated at 5 GHz centre frequency and was designed by using CST Software based on the 50Ω characteristic impedance for the transmission line model.

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