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(57) Abstract :
The present invention relates to a wideband polygon ring microstrip antenna (100) with a structure-shaped ground. The wideband polygon ring microstrip antenna (100) with structure-shaped ground comprises a hexagonal ring shape microstrip antenna (100). The hexagonal ring shape microstrip antenna (100) has a rectangular notch at the right and left-hand sides of the outer hexagonal structure of dimensions Lp3 × Wp3; and a ground plane. The width of the hexagonal ring shape microstrip antenna (100) line is Wp1 = 5.0 mm. The width of the hexagonal ring shape microstrip antenna (100) is taken to achieve a 50O characteristic impedance. The width of the hexagonal ring shape microstrip antenna (100) is fabricated and printed on a commercially available FR-4 substrate having thickness h = 1.6 mm. The present invention provides a wideband polygon ring microstrip antenna (100) with structure-shaped ground that can avoid the use of two or multiple antenna (100) to transmit video, voice, and data simultaneously.

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