

212.Title: MULTI-BAND AND POLARIZATION INSENSITIVE METAMATERIAL ABSORBER

Author: Huang, L; Chen, H

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Abstract: The design and realization of a multi-band and polarization insensitive metamaterial absorber is presented. The structure with thickness 1.1 mm consists of six close rings which distribute in two metallic layers separated by FR4 fiber glass PCB substrates. Experimental results show that over 93.3% absorption can be achieved in this metamaterial absorber at multiple frequency bands (more than two). Due to the rotational symmetric pattern of the metamaterial, the performance of the absorber is insensitive to the polarization of the incident waves, indicating the superiority of the structure in the application.