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| **Author(s) Name:** | Raja Rashidul Hasan, Raja Tariqul Hasan Tusher, Sujan Howlader, Sharmin Jahan | | |
| **Contact Email(s):** | sujan@aiub.edu | | |
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| **Abstract:** |  |
| An E-shaped micro strip patch antenna is designed and analyzed in this paper which operates in MICS (402.0-406.0MHz) band. The Performance has been observed on a body of human phantom model as well as in free space with different conducting material for the designed antenna. The height of this antenna is taken 1.5mm from the ground plane. At resonance frequency of 405 MHz the S11 parameter is obtained in free space is -23.26dB for conducting  material of aluminum and -17.96dB is measured on human phantom body at 405 MHz of resonance frequency. FR4 is used as substrate material. The Specific Absorption Rate (SAR) is found to be 0.3562 W/kg by placing the antanna on human phantom model. VSWR and directivity has been analyzed also. | |