Reconfigurable Water Dielectric Resonator Antennas

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Intro

- low profile,
- low dissipation loss,
- high dielectric strength
- higher power handling capacity
- Water
- Reconfigurable
Reconfigurable
2.1–3.9 GHz
Methodology

- Communications research lab II (NTU)
- Ansys HFSS
prototypes/experimented shapes

Rectangular

Cylindrical
Antenna specifications

Substrate
SI= 40mm
Sw= 40mm
Sh= 1.6mm

Resonator
Rd= 12mm
Rh= 11.1mm

Water
Wd= 3.3mm
Wh= varies

Patch
Pl= 13mm
Pw= 3mm
Ph= 1.6mm
Pthickness= 0.035mm

Ground
Gl= 40mm
Gw= 40mm
Simulation results
2.4 GHz
Limitations

- Travel time
- Knowledge gap
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References


OTHER REFERENCES

