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Design of a compact C-band adjustable power splitter

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This paper presents the detailed design of a compact C-band RF power splitter with adjustable power division ratios for high-power test platform. This power splitter can be tuned by moving the position of a short-circuit piston. Through optimizations, it has compact dimensions with negligible reflection and a large bandwidth. The surface electric fields are also minimized to prevent breakdown in order to operate at a high RF power. The design technique can be also widely used for any other power-splitting structures working at different frequencies.

Footnotes

Paper preparation format

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