

Contribution ID: 2149 Contribution code: TUPM059

Type: Poster Presentation

Improve availability of solid-state amplifier by optimizing power combiner

Tuesday, 9 May 2023 16:30 (2 hours)

Requirement of availability of CiADS (China Initiative Accelerator Driven System) is greater than 0.8. As a part of CiADS, high power RF system, including SSA (solid-state amplifier), high power transmission line, which availability should greater than 0.999. And hot-plug technology is a significant way to improve availability of SSA. But in the process of hot-plug, there will exist high power standing wave in the hot-plug port of power combiner. And reduce the combining power severely. Although, we can optimize the length of input arm of power combiner to a wavelength or closely to zero to avoid high power standing wave.

Funding Agency

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Session Classification: Tuesday Poster Session

Track Classification: MC4: Hadron Accelerators: MC4.A17: High Intensity Accelerators