

**Preliminary**

**Radial Combiner / 500MHz 10 way Combiner**

**RCR500-10158F00**

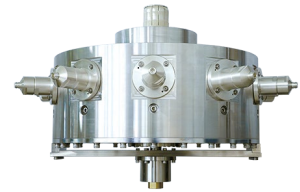


### Product Features

- Tunable Combiner
- Cavity type Combiner
- High Power combiner
- 6-1/8" EIA Output Interface
- 1-5/8" EIA Input Interface

### Applications

- High power SSPA combining
- Accelerator application



### Description

The RCR500-10158F00, 10 way combiner is designed for the high power SSPA combining application. The RCR500-10158F00 is a tunable combiner used in a 50kW SSPA system. This product has a tunable frequency range of  $\pm 1$  MHz.

### Electrical Specifications

PARAMETER	UNIT	SPECIFICATION
Operating Frequency	MHz	500
Insertion Loss	dB	< 0.1
Tunable range	MHz	$\pm 1.0$
Amplitude Balance	dB	$\pm 0.2$
Phase Balance	$^{\circ}$	$\pm 3$
Output VSWR	-	< 1.06 : 1
Isolation	dB	< -18
Power handling each Input	kW	Output power : CW 50 Input power : CW 5.0

### Mechanical Specifications

PARAMETER	UNIT	VALUE
Dimensions	mm	720 x 720 x 461
RF Input / Output Interface	-	1-5/8" EIA / 6-1/8" EIA
Material	-	Al / Cu / SUS
Cooling type	-	Air cooling

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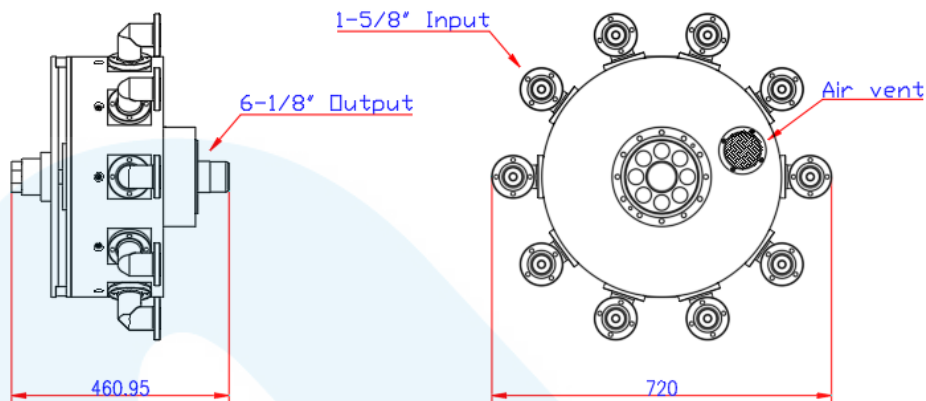
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### RCR500-10158F00



## Dimensions

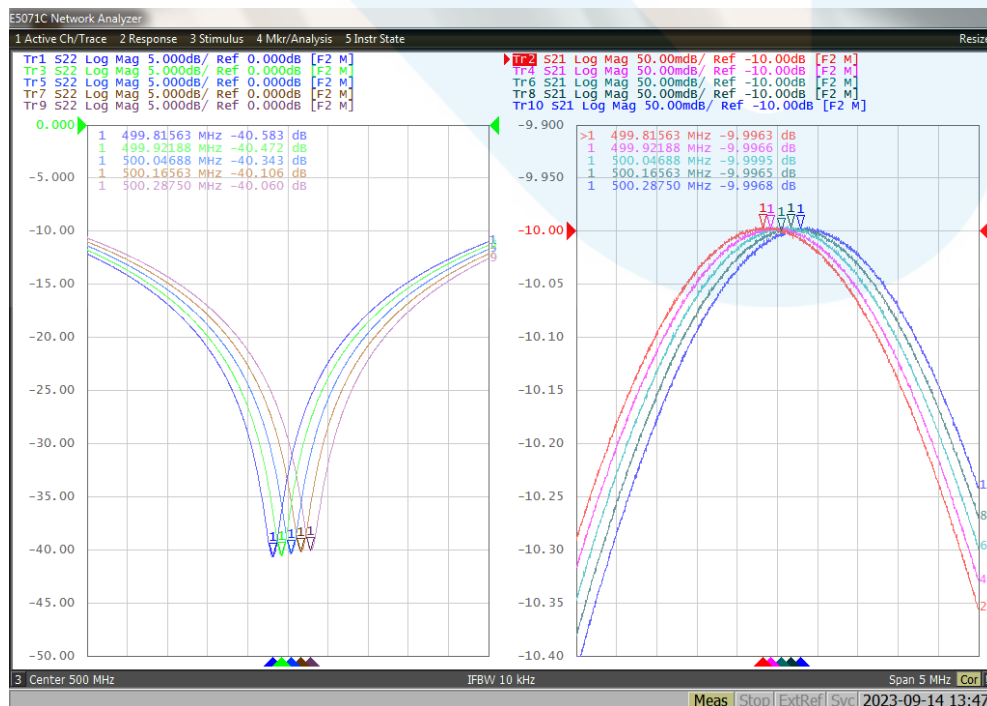
Unit: mm[inch]



### Note

\* Specifications are subject to change without notice.

## Typical data



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#### Option

1. 1-5/8" EIA right angle adapter
2. 1-5/8" EIA rigid line
3. 1-5/8" EIA to N(F) adapter
4. 6-1/8" EIA to N(F) adapter
5. 6-1/8" EIA to WR1800 adapter
6. 6-1/8" EIA rigid line
7. WR1800 to N(F) adapter
8. 6-1/8" EIA 60dB directional coupler
9. WR1800 60dB directional coupler
10. 1-5/8" EIA coupling element
11. 6-1/8" EIA coupling element
12. N type termination

#### Revision History

Part Number	Release Date	Version	Description	Data Sheet Status
RCR500-10158F00	05 Oct. 2023	0.1	1 <sup>st</sup> release	Preliminary



#### Certification

This product is manufactured by a company that is certified for the AS9100D quality management system.

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