

Preliminary

Radial Combiner / 500MHz 6 way Combiner

RCR500-6DF00



Product Features

- Radial Combiner
- High Power combiner
- 6-1/8" EIA Output Interface
- 7/16 Input Interface

Applications

- High power SSPA combining
- Accelerator application



Description

The RCR500-6DF00, 6 way combiner is designed for the high power SSPA combining application.

The RCR500-6DF00 is a combiner used in a 15kW SSPA system.

This product is a broadband combiner with a bandwidth of ± 10 MHz at VSWR 1.06:1.

Electrical Specifications

PARAMETER	UNIT	SPECIFICATION
Operating Frequency	MHz	500
Bandwidth	MHz	± 10
Insertion Loss	dB	< 0.1
Amplitude Balance	dB	± 0.2
Phase Balance	$^{\circ}$	± 3
Output VSWR	-	$< 1.06 : 1$
Isolation	dB	< -13
Power handling	kW	Output power : CW 15 Input power : CW 3

Mechanical Specifications

PARAMETER	UNIT	VALUE
Dimensions	mm	376 x 376 x 269
RF Input / Output Interface	-	7/16(F) / 6-1/8" EIA
Material	-	Al / Cu
Cooling type	-	N/A



Certification

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

Preliminary

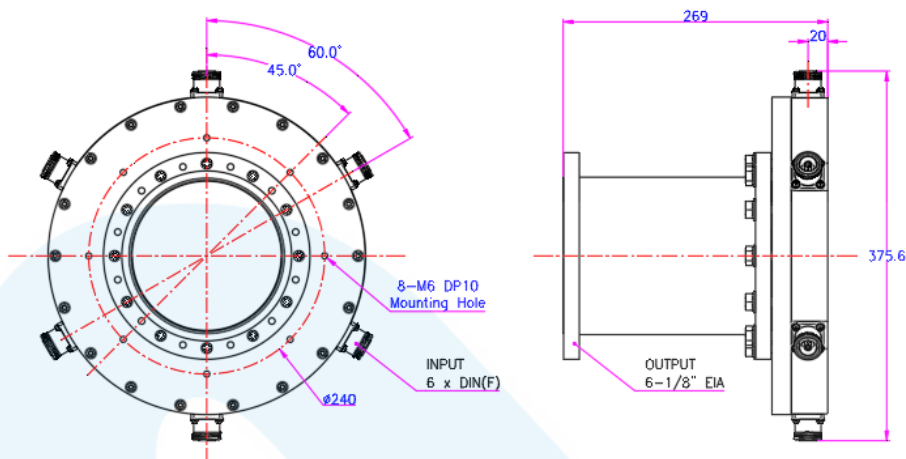
Radial Combiner / 500MHz 6 way Combiner

RCR500-6DF00



Dimensions

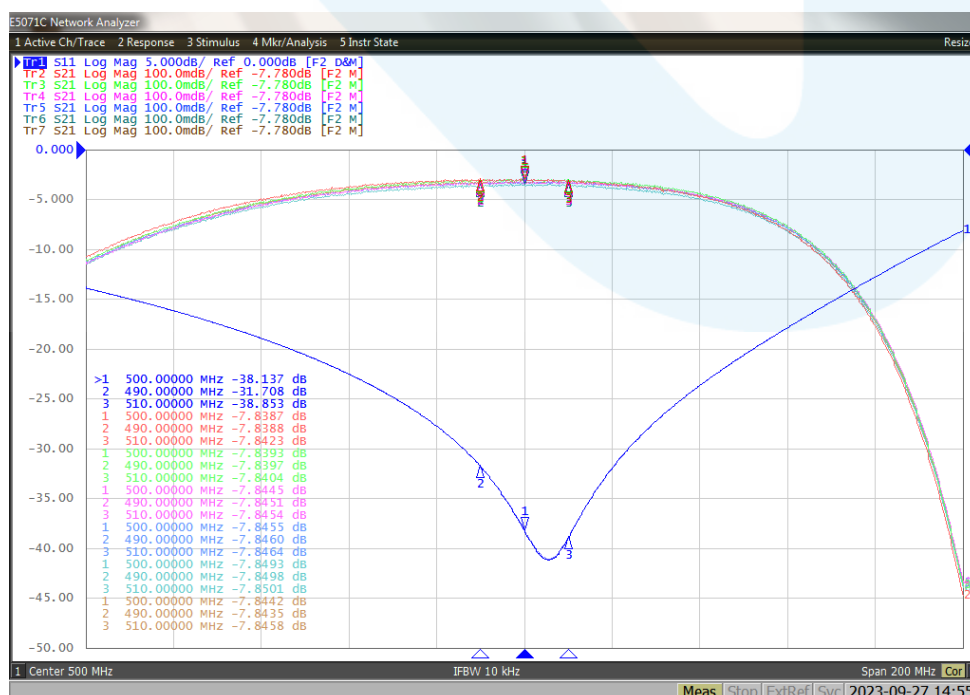
Unit: mm



Note

* Specifications are subject to change without notice.

Typical data



Preliminary

Radial Combiner / 500MHz 6 way Combiner

RCR500-6DF00



Option

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

Revision History

Part Number	Release Date	Version	Description	Data Sheet Status
RCR500-6DF00	06 Oct. 2023	0.1	1 st release	Preliminary



Certification

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

RFHIC Corporation reserves the right to make changes to any products herein or to discontinue any product at any time without notice. While product specifications have been thoroughly examined for reliability, RFHIC Corporation strongly recommends buyers to verify that the information they are using is accurate before ordering. RFHIC Corporation does not assume any liability for the suitability of its products for any particular purpose, and disclaims any and all liability, including without limitation consequential or incidental damages. RFHIC products are not intended for use in life support equipment or application where malfunction of the product can be expected to result in personal injury or death. Buyer uses or sells such products for any such unintended or unauthorized application, buyer shall indemnify, protect, and hold RFHIC Corporation and its directors, officers, stockholders, employees, representatives and distributors harmless against any and all claims arising out of such unauthorized use. All sales inquiries and support should be directed to the local authorized geographic distributor for RFHIC Corporation. For customers in the US, please contact the US sales team through our website at <https://rfhic.com/rfhic-us/>. For all other inquiries, please contact our international sales team through our website portal at <https://rfhic.com/contact/>