

RCS30-3-35 | 3dB Power Divider / Combiner

2 ways-0° | 1MHz to 135MHz | 25W | 3dB | >25dB isolation | 50Ω

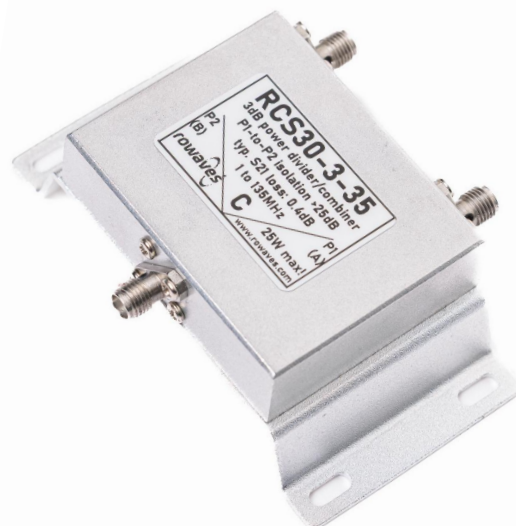
The RCS30-3-35 is a highly versatile, high-power divider / combiner designed for laboratory applications across the LF to VHF range. It offers greater than 25dB port-to-port isolation and excellent insertion loss characteristics. Primarily intended for laboratory measurements and test setups, its robust design makes it suitable for both low-power and high-power IMD measurement or similar applications.

■ Features:

- outstanding performance
- high port-to-port isolation
- ultra-light
- ruggedized aluminium enclosure
- SMA-F connectors
- CE and RED2014 - markings / declarations available

■ Typical Applications:

- intermodulation distortion measurements
- laboratory test applications
- LF to VHF transmitters / receivers
- reliability RF testing



■ Absolute Maximum Ratings & Environmental Specifications

Parameter	Testing conditions	Value	Units
Maximum Input Level (as divider)	for no damage	10	W
Operating Temperature	ambient	0...+40	°C
Relative Humidity	non condensing	10...70	%

■ Electrical Specifications:

@ TA = +25°C

Parameter	Testing conditions	Min.	Typ.	Max.	Units
Frequency Range	-	1	-	135	MHz
Internal Power Dissipation (as combiner)	-	-	-	25	W
Internal Power Dissipation (as divider)	-	-	-	5	W
Port-to-Port isolation	-	25	-	35	dB
Insertion Loss S21 above 3dB	-	-	-	0.4	dB

Note 1: Electrical specifications and performance data contained herein are based on ROWAVES applicable test performance criteria and measurement methods. Note 2: This document and the information contained herein is provided for evaluation purposes only and is subject to change without notice.

■ Typical Performance Data:

Freq. [MHz]	RCS30-3-35				
	Total loss S21 (dB)		Isolation S21 (dB)	VSWR P1 (A)	VSWR P2 (B)
	P1 (A)	P2 (B)			
2	3.09	3.09	35.83	1.09	1.09
5	3.09	3.1	35.32	1.08	1.08
14	3.12	3.12	33.23	1.07	1.07
32	3.16	3.17	29.09	1.05	1.06
50	3.20	3.21	26.73	1.02	1.04
80	3.30	3.30	25.93	1.10	1.14
100	3.42	3.42	27.62	1.21	1.26

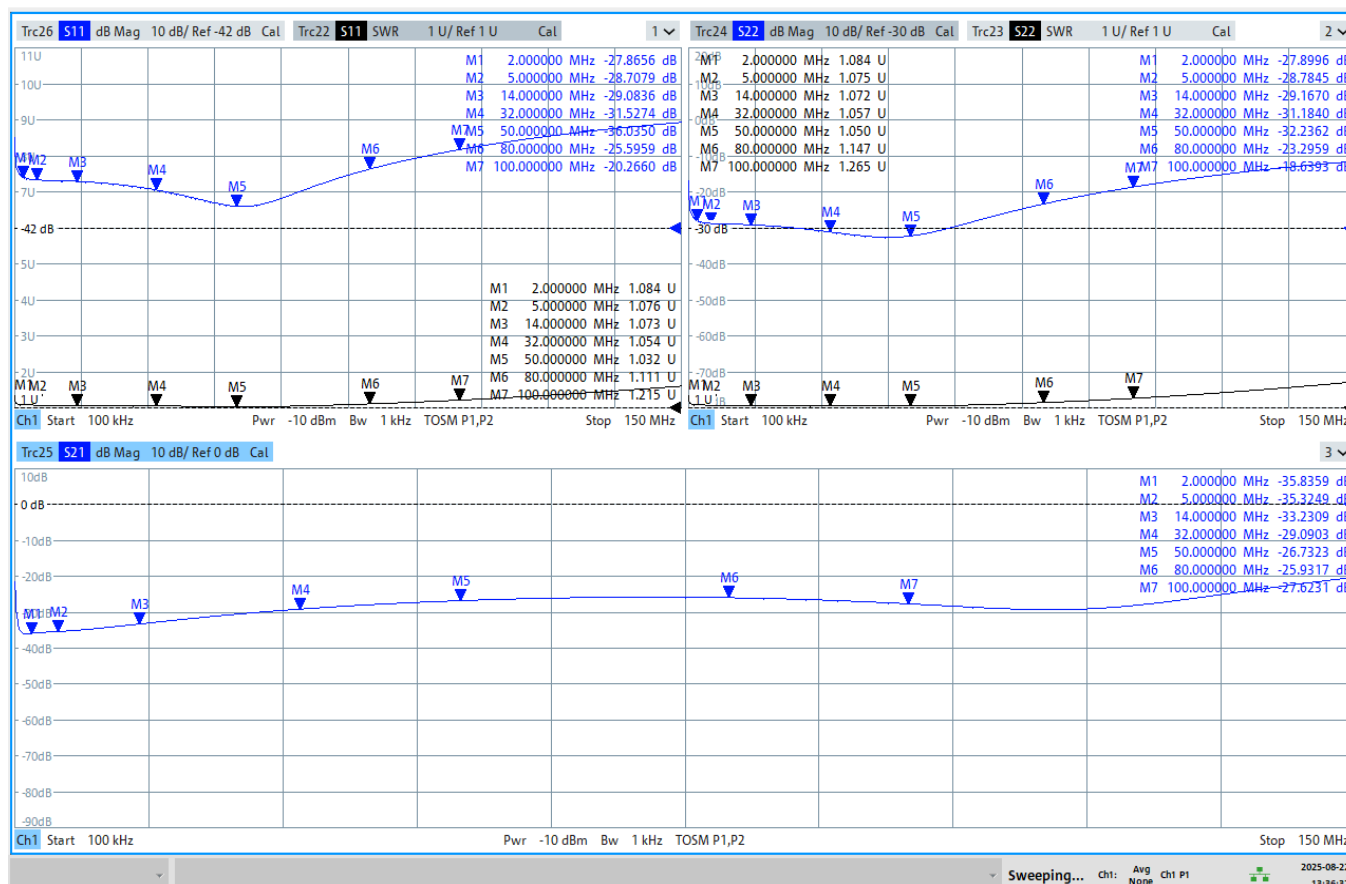


Fig.1 Port-to-port isolation (S21) for RCS30-3-35 combiner / splitter vs. VSWR (RL/S11)

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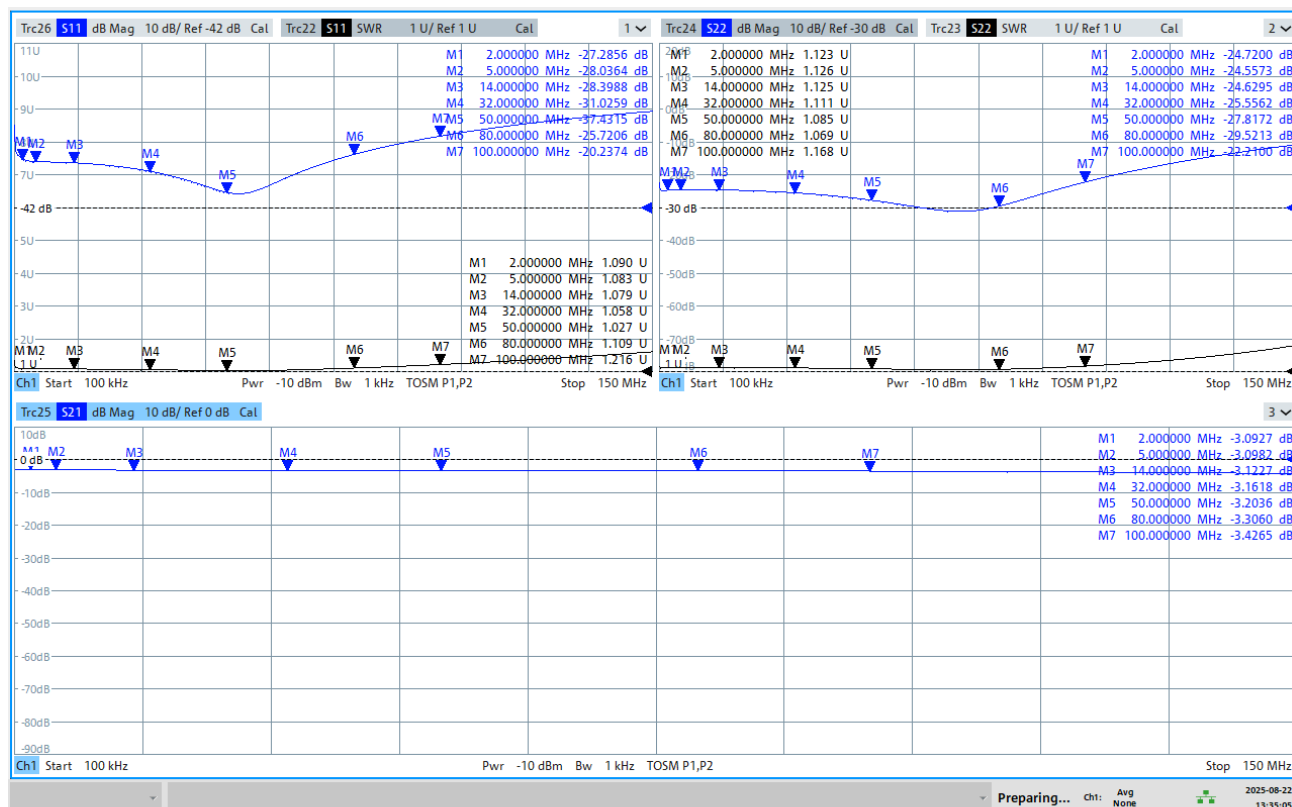


Fig.2 Insertion loss S21 at port P1(A) for RCS30-3-35 combiner/splitter vs. VSWR (RL/S11)

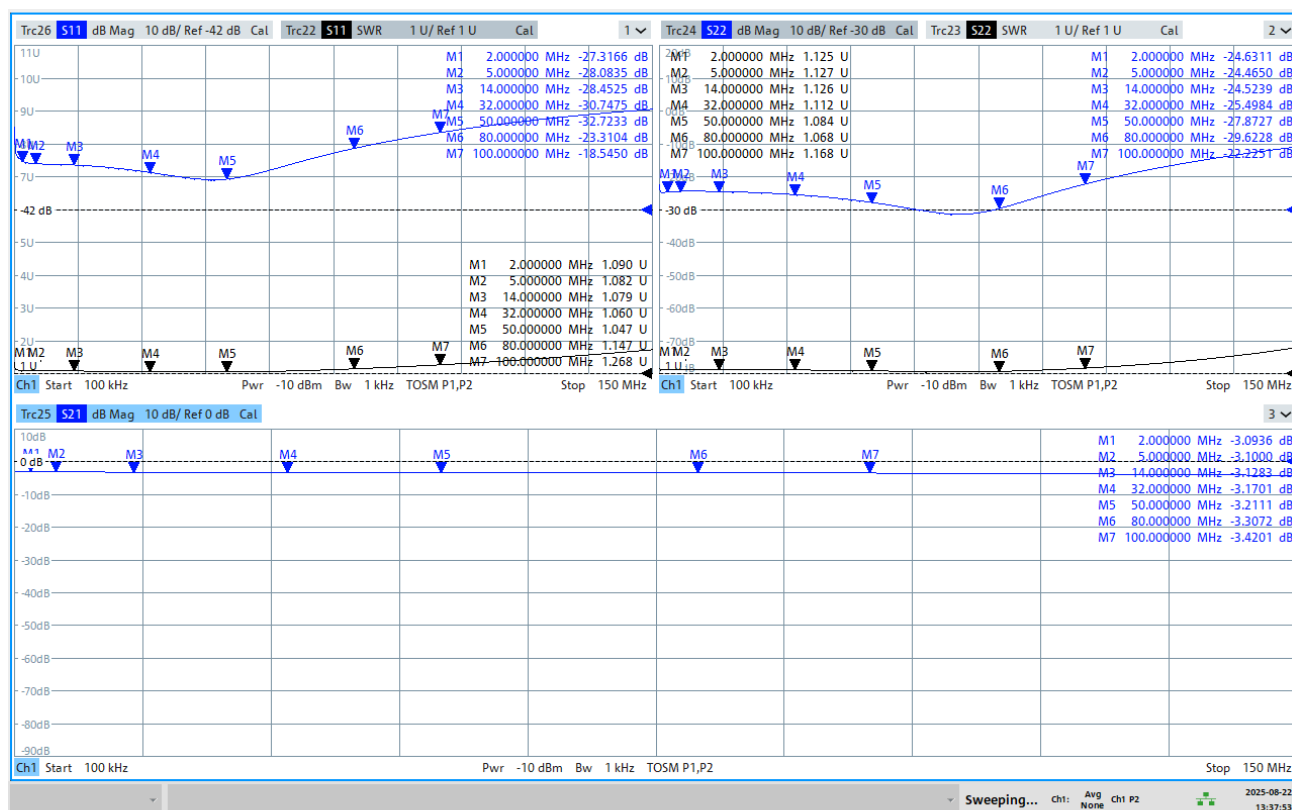
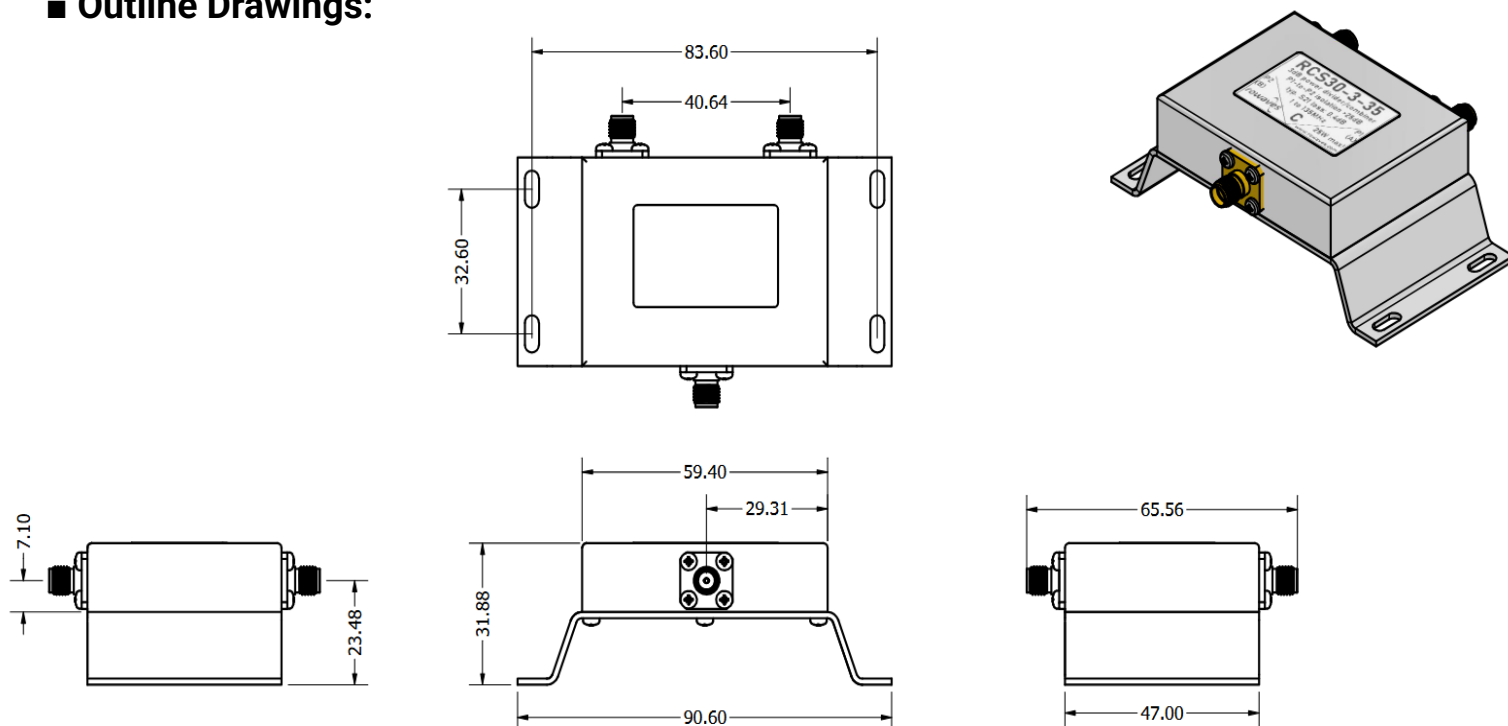


Fig.3 Insertion loss S21 at port P2(B) for RCS30-3-35 combiner/splitter vs. VSWR (RL/S11)

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■ Outline Drawings:



■ Mechanical Specifications:

Parameter	Value	Unit	Comments
Length	90.6 / 59 ± 0.1mm	mm	with / without mounting brackets
Width	46 ± 0.1mm	mm	with mounting brackets
Height	31 / 15 ± 0.1mm	mm	with / without mounting brackets
Weight	105	g	-
Cooling	-	-	natural convection, Aluminium block

■ Connectors

Description	Connectors no.1 (P1/A)	Connector no.2 (P2/B)	Connector no.3 (C)
Type	50Ω SMA-Female, straight	50Ω SMA-Female, straight	50Ω SMA-Female, straight

■ Ordering Information

Model	Mech. details	Description
RCS30-3-35	SMA-F connectors, aluminium enclosure	1 to 135MHz

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■ Change History | DS-10

date	change	comment
5 Sept 2025	initial release	1st revision available, added most important parameters for DS coverage
7 Oct 2025	added mechanical specifications added limit inputs etc.	2nd rev. released

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