

Coaxial

Power Splitter/Combiner

2 Way-0° Resistive 50Ω DC to 10000 MHz

ZFRSC-14-S+



Generic photo used for illustration purposes only

CASE STYLE: JJJ245

Connectors Model

SMA ZFRSC-14-S+

BRACKET (OPTION "B")

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

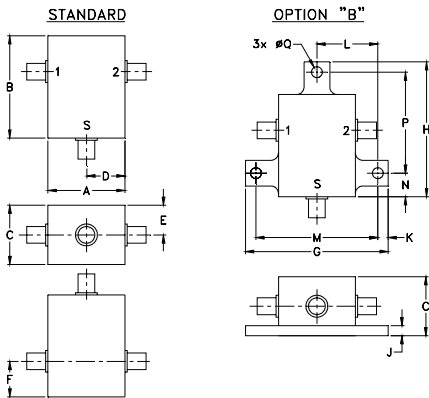
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	0.16W max.
Internal Dissipation	0.08W max.
Permanent damage may occur if any of these limits are exceeded.	

Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
0.75	1.00	0.58	0.38	0.29	0.35	1.39	1.32
19.05	25.4	14.732	9.65	7.37	8.89	35.31	33.53
J	K	L	M	N	P	Q	wt
0.10	0.10	0.595	1.19	0.23	0.995	0.106	grams
2.54	2.54	15.11	30.23	5.84	25.27	2.69	22.0

Electrical Schematic



Features

- very wideband, DC to 10000 MHz
- very good phase unbalance, 2 deg. typ.
- excellent amplitude unbalance, 0.2 dB typ.
- rugged shielded case

Applications

- laboratory
- test set-ups

Electrical Specifications at 25°C

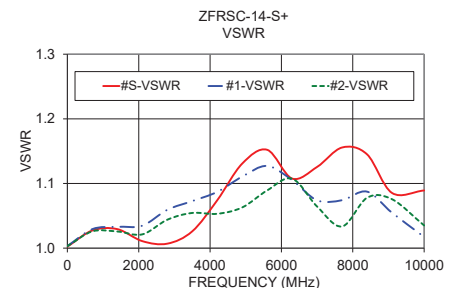
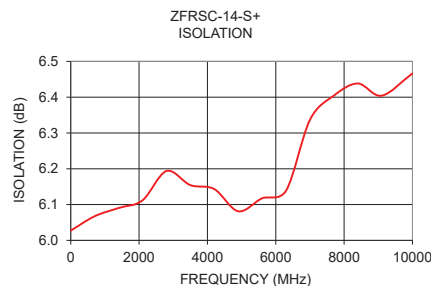
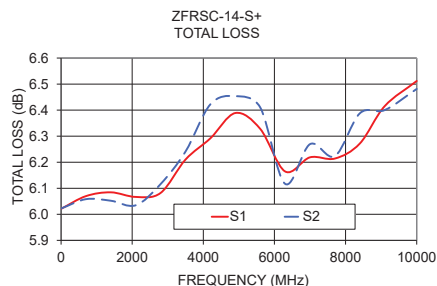
Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC		10000	MHz
Insertion Loss Above 6.0 dB	DC - 6000	—	0.3	0.7	dB
	6000 - 10000	—	0.7	1.0	
Isolation	DC - 6000	—	6.2	—	dB
	6000 - 10000	—	6.5	—	
Phase Unbalance	DC - 6000	—	2	5	Degree
	6000 - 10000	—	4	8	
Amplitude Unbalance	DC - 6000	—	0.2	0.5	dB
	6000 - 10000	—	0.3	0.7	
VSWR (Port S)	DC - 6000	—	1.15	—	:1
	6000 - 10000	—	1.20	—	
VSWR (Port 1-4)	DC - 6000	—	1.10	—	:1
	6000 - 10000	—	1.10	—	

This is a resistive power divider to enable frequency coverage from DC to the highest rated frequency. Since resistive power divider do not provide a high degree of isolation (basically isolation equals the insertion loss between ports).

Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1	6.02	6.02	0.00	6.03	0.01	1.00	1.00	1.00
700	6.07	6.06	0.01	6.07	0.29	1.03	1.03	1.03
1400	6.08	6.05	0.03	6.09	0.39	1.03	1.03	1.03
2100	6.07	6.03	0.03	6.11	0.37	1.01	1.03	1.02
2800	6.08	6.12	0.03	6.19	0.68	1.01	1.06	1.04
3500	6.21	6.24	0.03	6.15	1.00	1.03	1.07	1.05
4200	6.29	6.42	0.13	6.14	1.34	1.07	1.09	1.05
4900	6.39	6.45	0.06	6.08	1.86	1.13	1.11	1.06
5600	6.33	6.41	0.08	6.12	2.05	1.15	1.13	1.09
6300	6.16	6.12	0.05	6.14	2.49	1.11	1.11	1.11
7000	6.22	6.27	0.05	6.34	2.65	1.13	1.07	1.06
7700	6.21	6.22	0.01	6.40	2.16	1.16	1.07	1.03
8400	6.27	6.39	0.12	6.44	3.89	1.15	1.09	1.08
9100	6.42	6.40	0.02	6.40	1.75	1.09	1.05	1.08
10000	6.51	6.48	0.03	6.47	3.39	1.09	1.02	1.04

1. Total Loss = Insertion Loss + 6dB splitter loss.



Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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