

Coaxial

# Power Splitter/Combiner

## ZFRSC-14+

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



Generic photo used for illustration purposes only

### 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

### Features

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

CASE STYLE: JJJ245

Connectors	Model
SMA	ZFRSC-14-S+
<b>BRACKET (OPTION "B")</b>	

**+RoHS Compliant**

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

### Applications

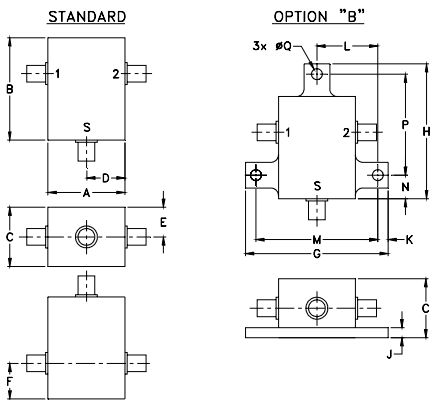
- laboratory
- test set-ups

### Electrical Specifications at 25°C

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

### 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

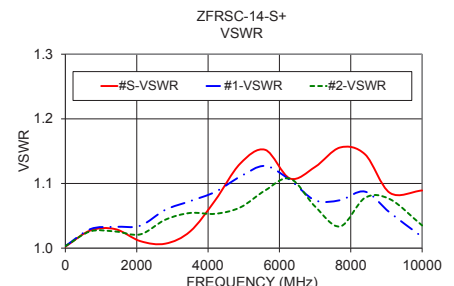
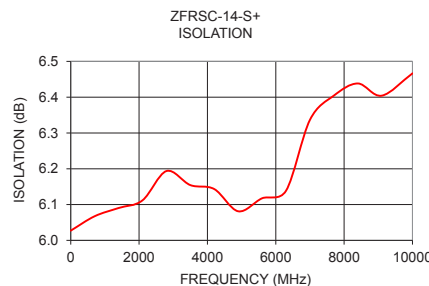
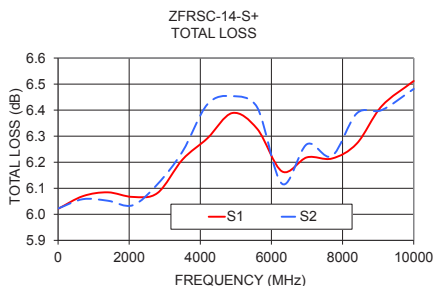
### Electrical Schematic



### Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (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

- 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.
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