

Coaxial

Power Splitter/Combiner

2 Way-0° Resistive 50Ω DC to 12000 MHz

ZFRSC-123-S+



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 12000 MHz
- very good phase unbalance, 1 deg. typ.
- excellent amplitude unbalance, 0.1 dB typ.
- rugged shielded case

Applications

- laboratory
- IP3 test set-ups

CASE STYLE: JJJ245

Connectors Model

SMA ZFRSC-123-S+

BRACKET (OPTION "B")

+RoHS Compliant

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

Electrical Specifications $T_{AMB}=25^{\circ}\text{C}$

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6.0 dB				PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)	
	L	U	L		U		L	U	L	U
f_L-f_U	Typ.	Typ.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.
DC-12000	19.5	19.5	3.5	4.0	3.5	4.0	3	5	0.25	0.4

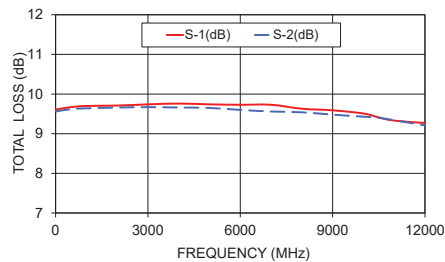
L = DC-6000 MHz U = 6000-12000 MHz

Typical Performance Data

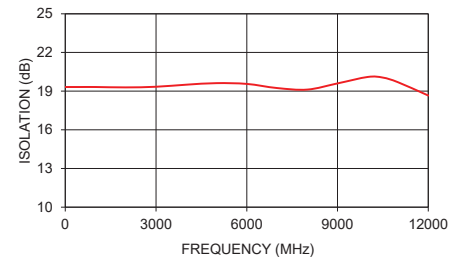
Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
1.00	9.61	9.56	0.05	19.32	0.06	1.01	1.00	1.01
500.00	9.67	9.62	0.05	19.32	0.07	1.02	1.01	1.01
1000.00	9.70	9.64	0.06	19.32	0.21	1.02	1.01	1.01
2000.00	9.71	9.66	0.05	19.29	0.48	1.02	1.01	1.01
3000.00	9.74	9.67	0.07	19.34	0.61	1.04	1.02	1.01
4000.00	9.76	9.66	0.10	19.50	0.78	1.05	1.04	1.02
5000.00	9.74	9.65	0.09	19.62	1.20	1.06	1.05	1.04
6000.00	9.73	9.60	0.13	19.56	1.60	1.06	1.06	1.06
7000.00	9.73	9.56	0.17	19.24	1.46	1.07	1.07	1.07
8000.00	9.63	9.54	0.09	19.12	1.56	1.09	1.12	1.07
9000.00	9.59	9.48	0.11	19.60	2.82	1.15	1.10	1.06
10000.00	9.51	9.43	0.07	20.10	2.52	1.21	1.05	1.03
10500.00	9.41	9.40	0.01	20.05	2.37	1.22	1.03	1.01
11000.00	9.33	9.34	0.00	19.69	2.67	1.23	1.04	1.01
12000.00	9.27	9.21	0.07	18.66	2.79	1.20	1.02	1.05

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

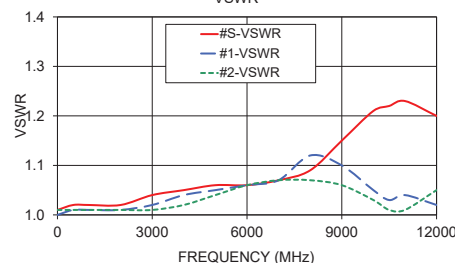
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TOTAL LOSS



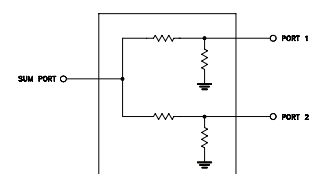
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ISOLATION



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VSWR



electrical schematic



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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