

Coaxial

# Power Splitter/Combiner

ZFSC-4-1W+  
ZFSC-4-1W

4 Way-0° 50Ω 10 to 500 MHz



BNC version shown  
CASE STYLE: G15

## Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.250W max.

Permanent damage may occur if any of these limits are exceeded.

## Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3
PORT 4	4

## Features

- wideband, 10 to 500 MHz
- good isolation, 23 dB typ.
- rugged shielded case
- good VSWR, 1.15:1

## Applications

- VHF/UHF
- radio communication

Connectors	Model
BNC	ZFSC-4-1W-BNC(+)
SMA	ZFSC-4-1W-S+
BRACKET (OPTION "B")	

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

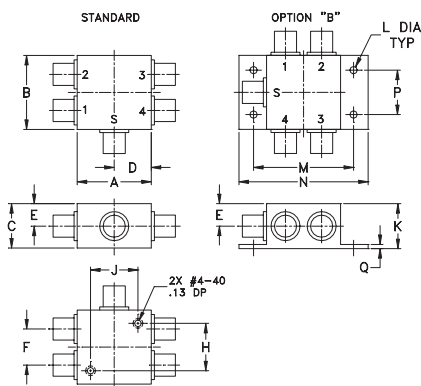
The + suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

## Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 6.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f <sub>c</sub> -f <sub>u</sub>																		
10-500	23	20	23	20	23	20	0.6	1.5	0.6	1.5	0.6	1.5	4	8	8	0.2	0.3	0.4

L = low range [f<sub>L</sub> to 10 f<sub>L</sub>] M = mid range [10 f<sub>L</sub> to f<sub>u</sub>/2] U = upper range [f<sub>u</sub>/2 to f<sub>u</sub>]

## Outline Drawing

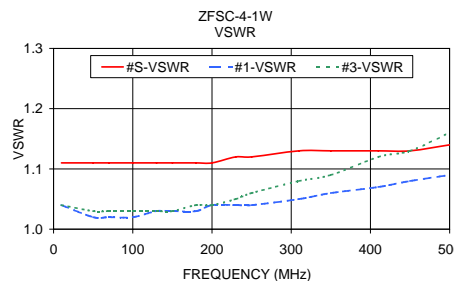
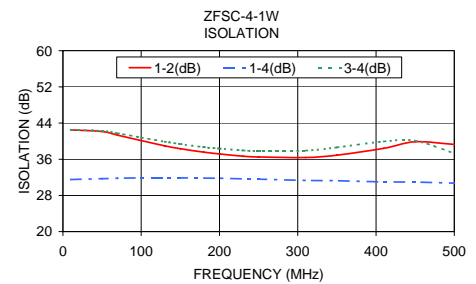
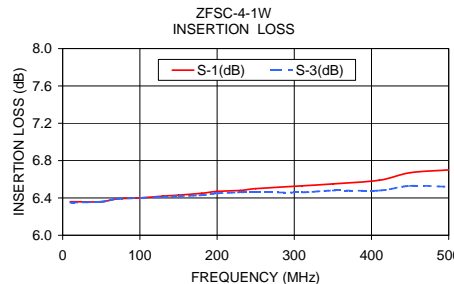


## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	.61	--	.80
31.75	31.75	19.05	16.00	9.65	15.49	--	20.32
J	K	L	M	N	P	Q	wt
.80	.76	.125	1.688	2.18	.75	.07	grams
20.32	19.30	3.18	42.88	55.37	19.05	1.78	85.0

## Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3	VSWR 4
	S-1	S-2	S-3	S-4		1-2	1-4	3-4						
10	6.36	6.35	6.35	6.35	0.01	42.49	31.51	42.51	0.07	1.11	1.04	1.04	1.04	1.04
50	6.36	6.36	6.36	6.36	0.01	42.13	31.71	42.28	0.28	1.11	1.02	1.02	1.03	1.03
70	6.39	6.38	6.39	6.38	0.01	41.32	31.80	41.74	0.38	1.11	1.02	1.02	1.03	1.02
100	6.40	6.40	6.40	6.39	0.00	40.14	31.90	40.81	0.54	1.11	1.02	1.03	1.03	1.03
130	6.42	6.40	6.41	6.41	0.01	38.97	31.90	39.89	0.68	1.11	1.03	1.03	1.03	1.03
150	6.43	6.42	6.42	6.43	0.01	38.33	31.88	39.37	0.78	1.11	1.03	1.03	1.03	1.03
180	6.45	6.43	6.43	6.44	0.02	37.56	31.84	38.69	0.92	1.11	1.03	1.04	1.04	1.04
200	6.47	6.45	6.45	6.47	0.02	37.18	31.81	38.39	1.05	1.11	1.04	1.04	1.04	1.04
230	6.48	6.45	6.46	6.48	0.03	36.66	31.66	37.95	1.16	1.12	1.04	1.05	1.05	1.04
250	6.50	6.46	6.46	6.48	0.04	36.50	31.61	37.84	1.25	1.12	1.04	1.06	1.06	1.05
310	6.53	6.47	6.46	6.52	0.07	36.39	31.33	37.92	1.52	1.13	1.05	1.07	1.08	1.06
350	6.55	6.48	6.48	6.53	0.07	36.90	31.27	38.63	1.74	1.13	1.06	1.08	1.09	1.06
410	6.59	6.49	6.48	6.57	0.12	38.42	30.99	39.94	1.88	1.13	1.07	1.11	1.12	1.07
450	6.67	6.56	6.53	6.63	0.13	39.87	30.96	40.10	2.05	1.13	1.08	1.12	1.13	1.08
500	6.70	6.54	6.52	6.66	0.18	39.29	30.72	37.36	2.17	1.14	1.09	1.14	1.16	1.09



## electrical schematic



**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED  
IFIRF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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