

Coaxial

# Power Splitter/Combiner

## ZFSC-4-175+ ZFSC-4-175

4 Way-0° 75Ω 10 to 1000 MHz



### 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 1000MHz
- high isolation, 38 dB typ.

### Applications

- VHF/UHF
- cellular
- transmitters/receivers

CASE STYLE: G15

Connectors Model  
BNC ZFSC-4-175(+)  
BRACKET(OPTION "B")

**+RoHS Compliant**  
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.
$f_L$ - $f_U$							0.5	0.8	0.6	1.2	0.9	2.0	—	—	—	0.2	0.3	0.6
10-1000	35	25	38	20	22	18												

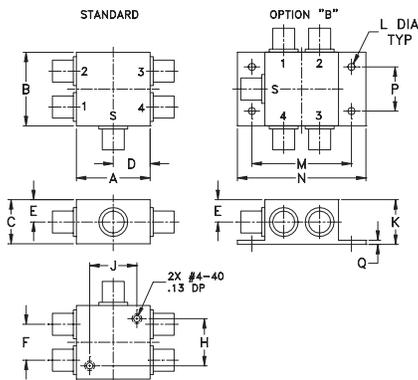
L = low range [ $f_L$  to 10  $f_L$ ] M = mid range [10  $f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (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						
10.00	6.47	6.47	6.46	6.47	0.01	38.86	35.62	37.00	0.06	1.10	1.26	1.23	1.25	1.24
50.00	6.51	6.51	6.51	6.50	0.01	43.86	36.02	39.52	0.17	1.13	1.27	1.37	1.26	1.37
100.00	6.56	6.55	6.56	6.56	0.01	42.89	35.36	37.85	0.16	1.17	1.29	1.42	1.28	1.42
156.00	6.60	6.60	6.59	6.60	0.01	41.57	34.91	35.80	0.32	1.23	1.30	1.43	1.29	1.42
212.00	6.62	6.61	6.61	6.61	0.01	40.24	34.56	34.27	0.41	1.27	1.31	1.42	1.29	1.41
240.00	6.67	6.66	6.66	6.67	0.01	39.52	34.53	33.67	0.46	1.29	1.32	1.41	1.29	1.40
324.00	6.72	6.71	6.72	6.72	0.01	36.91	34.32	32.00	0.68	1.34	1.33	1.38	1.29	1.38
404.00	6.74	6.72	6.73	6.74	0.02	34.11	34.34	30.56	0.86	1.36	1.35	1.36	1.30	1.35
452.00	6.76	6.72	6.73	6.74	0.04	32.53	34.35	29.71	0.96	1.36	1.36	1.34	1.31	1.34
500.00	6.77	6.74	6.76	6.77	0.04	31.02	34.42	28.87	1.09	1.34	1.36	1.33	1.31	1.33
614.00	6.85	6.81	6.82	6.83	0.04	28.26	33.93	26.85	1.36	1.27	1.37	1.31	1.32	1.32
728.00	6.94	6.88	6.95	6.95	0.07	26.47	32.35	25.28	1.63	1.16	1.39	1.32	1.34	1.35
804.00	7.06	7.00	7.10	7.09	0.10	25.80	31.03	24.46	1.66	1.13	1.40	1.34	1.37	1.40
904.00	7.23	7.17	7.34	7.31	0.17	25.14	29.60	23.85	1.84	1.23	1.45	1.40	1.42	1.48
1000.00	7.40	7.32	7.58	7.52	0.25	24.17	27.58	25.76	1.84	1.45	1.50	1.46	1.48	1.57

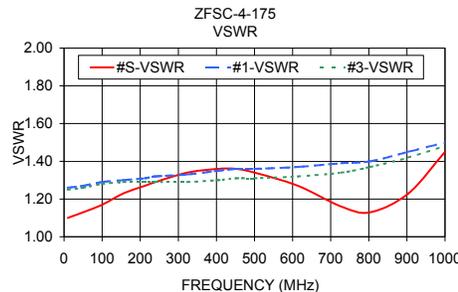
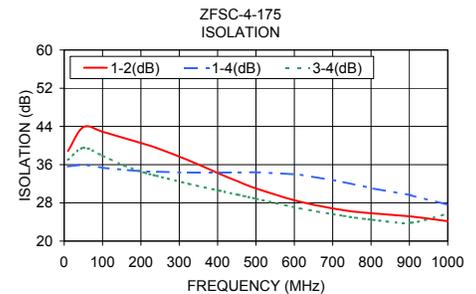
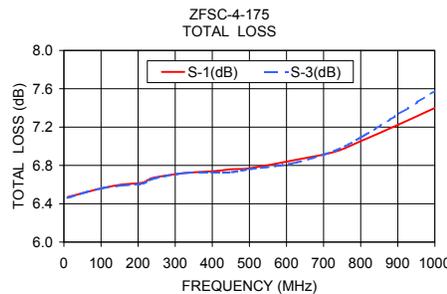
1. Total Loss = Insertion Loss + 6dB splitter loss.

### 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



### electrical schematic



### 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at [www.minicircuits.com/WCLStore/terms.jsp](http://www.minicircuits.com/WCLStore/terms.jsp)

