

# Power Splitter/Combiner

ZFSC-12-1W-75

12 Way-0° 75Ω 5 to 860 MHz



Generic photo used for illustration purposes only

CASE STYLE: R67

Connectors	Model
BNC	ZFSC-12-1W-75

## Maximum Ratings

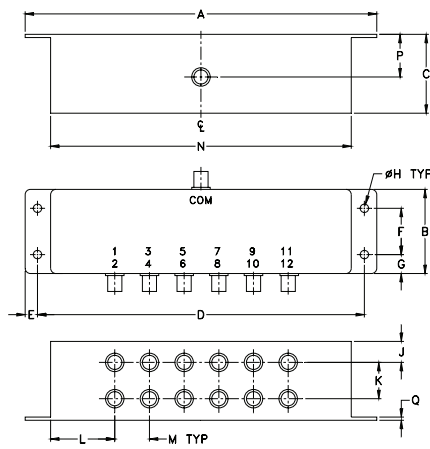
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.87W max.

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

## Coaxial Connections

SUM PORT	S(COM)
PORT 1,2,3,.....,12	1,2,3,.....,12

## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
6.69	1.60	1.50	6.22	.24	.88	.36	.160
169.93	40.64	38.10	157.99	6.10	22.35	9.14	4.06
J	K	L	M	N	P	Q	wt.
.40	.69	1.22	.66	5.72	.81	.06	grams
10.16	17.53	30.99	16.76	145.29	20.57	1.52	310.0

## Features

- high isolation, 35 dB typ.
- excellent amplitude unbalance, 0.2 dB typ.
- rugged shielded case

## Applications

- VHF/UHF
- federal and defense communications
- instrumentation

## Electrical Specifications

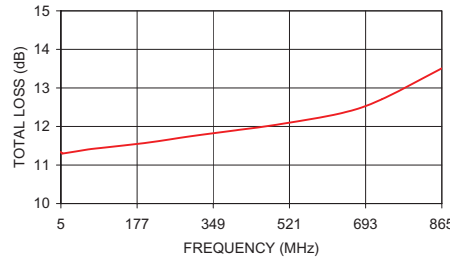
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 10.8 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
$f_L$ - $f_U$	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
5-860	33	22	30	20	26	18	0.5	1.2	0.8	2.5	1.6	4.2	2	8	20	0.7	0.8	1.5

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  $f_U$ ]

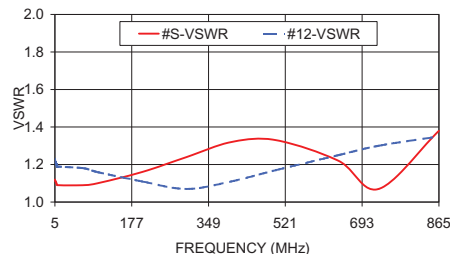
## Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 12
			Adjacent	Opposite			
5.00	11.34	0.11	32.45	37.42	0.47	1.12	1.23
6.00	11.32	0.11	32.87	37.57	0.47	1.11	1.21
7.00	11.31	0.10	33.13	37.71	0.44	1.11	1.21
8.00	11.30	0.10	33.33	37.80	0.45	1.10	1.20
9.00	11.31	0.09	33.47	37.86	0.41	1.10	1.20
10.00	11.30	0.10	33.58	37.90	0.45	1.09	1.19
70.00	11.41	0.04	32.40	33.98	0.74	1.09	1.18
100.00	11.45	0.06	31.34	32.22	0.69	1.10	1.16
200.00	11.58	0.08	28.50	28.31	0.84	1.16	1.11
300.00	11.75	0.12	27.11	26.53	0.96	1.24	1.07
400.00	11.90	0.19	26.65	25.92	0.96	1.32	1.11
500.00	12.06	0.25	26.39	25.96	1.32	1.33	1.17
640.00	12.35	0.40	25.20	26.20	2.75	1.22	1.25
730.00	12.71	0.49	24.34	25.95	3.88	1.07	1.30
865.00	13.51	0.66	23.49	26.29	5.58	1.38	1.35

ZFSC-12-1W-75 TOTAL LOSS

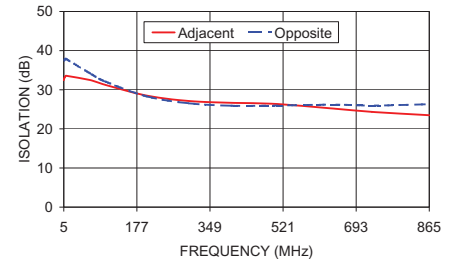


ZFSC-12-1W-75 VSWR



1. Total Loss = Insertion Loss + 10.8dB splitter loss.

ZFSC-12-1W-75 ISOLATION



## 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.
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