

Power Splitter/Combiner

12 Way-0° 75Ω 10 to 500 MHz

ZFSC-12-175+
ZFSC-12-175



Maximum Ratings

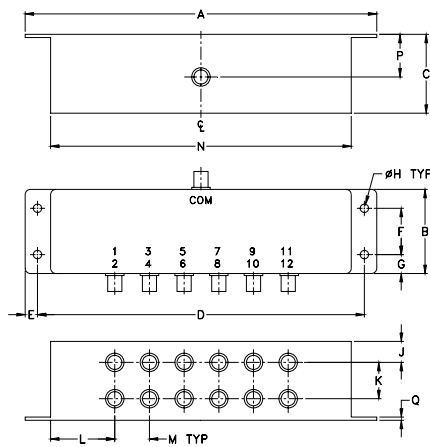
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.87W max.

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

- wideband, 10 to 500 MHz
- good isolation, 24 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- communication systems
- instrumentation

BNC version shown
CASE STYLE: R67

Connectors	Model
BNC	ZFSC-12-175(+)

+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 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.						
10-500	23	20	24	20	22	18	0.9	1.2	1.0	1.3	1.2	2.0	—	—	—	0.4	0.5	0.8

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]

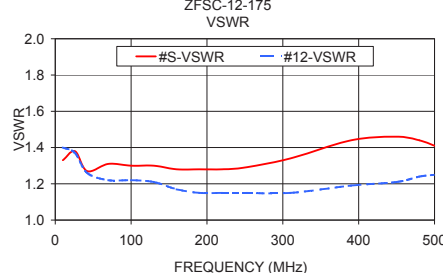
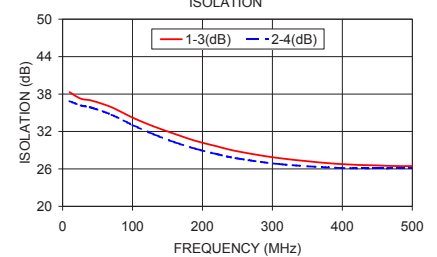
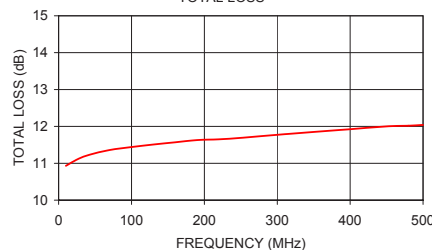
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)	Amplitude Unbalance (dB)	Isolation (dB)		Phase Unbalance (deg.)	VSWR S	VSWR 12
			1-3	2-4			
10.00	10.93	0.25	38.30	36.86	1.05	1.33	1.40
26.00	11.11	0.17	37.26	36.17	1.29	1.38	1.37
42.00	11.23	0.11	36.94	35.79	1.41	1.27	1.26
70.00	11.36	0.10	35.88	34.68	1.49	1.31	1.22
100.00	11.44	0.11	34.22	33.04	1.30	1.30	1.22
130.00	11.51	0.16	32.82	31.56	1.06	1.30	1.21
160.00	11.57	0.18	31.62	30.28	0.94	1.28	1.17
190.00	11.63	0.19	30.50	29.23	0.96	1.28	1.15
220.00	11.65	0.19	29.64	28.39	1.05	1.28	1.15
250.00	11.69	0.19	28.82	27.68	1.08	1.29	1.15
310.00	11.79	0.21	27.73	26.77	1.38	1.34	1.15
390.00	11.91	0.25	26.84	26.18	1.47	1.44	1.19
450.00	12.00	0.33	26.56	26.07	1.57	1.46	1.21
480.00	12.02	0.37	26.45	26.11	1.55	1.44	1.24
500.00	12.04	0.40	26.46	26.14	1.65	1.41	1.25

ZFSC-12-175 TOTAL LOSS

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

ZFSC-12-175 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.
- The parts covered by this specification document are subject to Mini-Circuits 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-Circuits' website at www.minicircuits.com/WCLStore/terms.jsp

