

High Power Combiner

6 Way-0° 50Ω 50 to 150 MHz

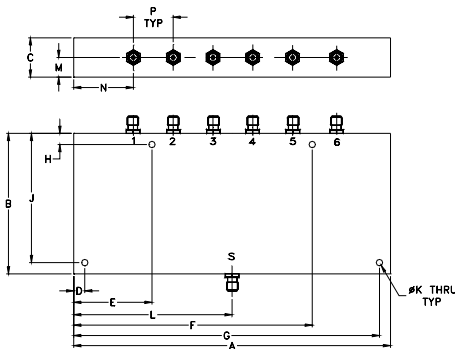
Maximum Ratings

Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C
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
PORT 5	5
PORT 6	6

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	
7.06	3.13	.88	.250	1.750	5.310	6.810	.250	
179.32	79.50	22.35	6.35	44.45	134.87	172.97	6.35	
J	K	L	M	N	P		wt	
2.875	.144	3.53	.44	1.31	.89		grams	
73.03	3.66	89.66	11.18	33.27	22.61		800	

Features

- input power, up to 12W input power
- low insertion loss, 0.5 dB typ.
- high isolation, 32 dB typ.

Applications

- VHF
- instrumentation

ZB6CS-150-12W



BNC version shown
CASE STYLE: Z259

Connectors	Model
BNC	ZB6CS-150-12W
N-TYPE	ZB6CS-150-12W-N
SMA	ZB6CS-150-12W-S

High Power Combiner Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 7.8 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		POWER INPUT ¹ (W)	
f_L - f_U	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	as combiner ² Max.	as splitter Max.
50-150	32	20	0.5	1.2	3.0	9.0	0.15	0.5	12	10

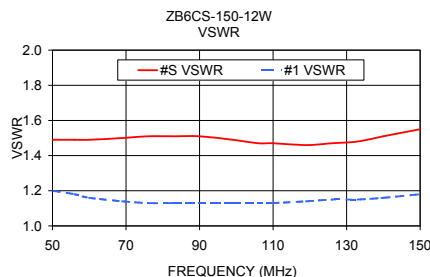
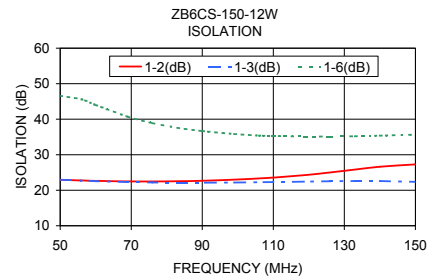
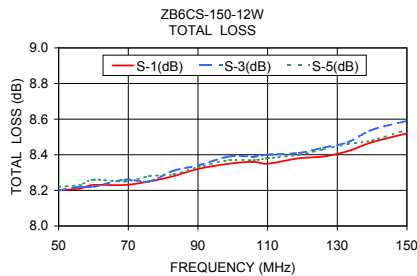
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C

2. As a combiner of non-coherent signals, max. power per port is power rating divided by number of ports.

Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)			Amplitude Unbalance (dB)	Isolation (dB)			Phase Unbalance (deg.)	VSWR S	VSWR 1
	S-1	S-3	S-5		1-2	1-3	1-6			
50.00	8.20	8.20	8.22	0.03	22.93	22.96	46.56	1.45	1.49	1.20
56.00	8.21	8.22	8.23	0.04	22.74	22.72	45.60	1.47	1.49	1.18
60.00	8.23	8.22	8.26	0.06	22.64	22.56	44.01	1.62	1.49	1.16
69.00	8.23	8.26	8.25	0.04	22.49	22.30	40.71	1.84	1.50	1.14
76.00	8.25	8.25	8.28	0.05	22.47	22.18	38.91	1.99	1.51	1.13
83.00	8.28	8.31	8.29	0.05	22.53	22.13	37.59	2.26	1.51	1.13
90.00	8.32	8.34	8.33	0.05	22.67	22.13	36.68	2.45	1.51	1.13
99.00	8.35	8.39	8.37	0.07	22.98	22.17	35.84	2.68	1.49	1.13
106.00	8.36	8.39	8.37	0.07	23.32	22.25	35.39	2.90	1.47	1.13
110.00	8.35	8.40	8.38	0.07	23.56	22.30	35.27	2.97	1.47	1.13
119.00	8.38	8.41	8.40	0.08	24.28	22.43	35.13	3.27	1.46	1.14
126.00	8.39	8.44	8.43	0.08	25.01	22.54	35.12	3.59	1.47	1.15
133.00	8.42	8.47	8.46	0.09	25.82	22.60	35.20	3.94	1.48	1.15
140.00	8.47	8.54	8.48	0.11	26.61	22.60	35.36	4.37	1.51	1.16
150.00	8.52	8.59	8.54	0.12	27.29	22.35	35.67	4.63	1.55	1.18

1. Total Loss = Insertion Loss + 7.8dB splitter loss.



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.
 C. 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/MCLStore/terms.jsp

