

Coaxial High Power Combiner

ZB4CS-700-10W

4 Way-0° 50Ω 400 to 700 MHz

Maximum Ratings

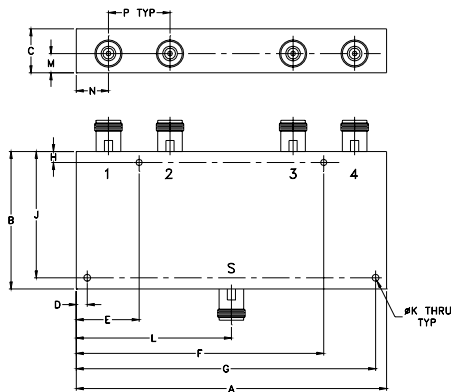
Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C
Internal Dissipation	8W max.

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

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
7.06	3.13	1.00	.250	1.430	5.630	6.810	.250
179.32	79.50	25.40	6.35	36.32	143.00	172.97	6.35
J	K	L	M	N	P	wt	
2.875	.156	3.53	.44	.73	1.40	grams	
73.03	3.96	89.66	11.18	18.54	35.56	810	

Features

- high power, up to 10W input power
- low insertion loss, 0.35 dB typ.
- good isolation, 25 dB typ.
- good sum-port VSWR, 1.14 typ.
- good VSWR at ports 1-4, 1.10 typ.

Applications

- UHF-TV/DTV
- communication receivers & transmitters



CASE STYLE: Z689

Connectors	Model	Price	Qty.
N-TYPE	ZB4CS-700-10W-N	\$134.95	(1-9)

High Power Combiner Electrical Specifications

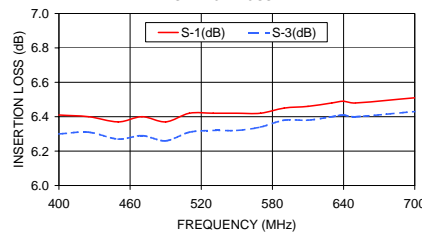
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6.0 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		POWER INPUT ¹ (W)	
	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	as combiner ² Max.	as splitter Max.
f _L -f _H										
400-700	25	20	0.35	0.8	0.6	4.0	0.1	0.3	10	20

- Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C
- As a combiner of non-coherent signals, max. power per port is power rating divided by number of ports.

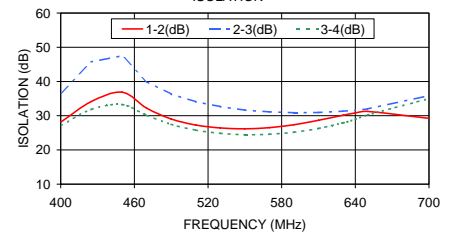
Typical Performance Data

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	2-3	3-4						
400.00	6.41	6.26	6.30	6.34	0.15	28.12	36.59	27.11	0.21	1.29	1.14	1.15	1.15	1.16
425.00	6.40	6.27	6.31	6.35	0.14	34.17	45.74	31.85	0.10	1.19	1.13	1.14	1.14	1.15
450.00	6.37	6.25	6.27	6.30	0.12	36.86	47.56	33.26	0.11	1.09	1.11	1.13	1.12	1.13
470.00	6.40	6.26	6.29	6.31	0.14	32.20	39.98	30.16	0.23	1.03	1.10	1.11	1.10	1.11
490.00	6.37	6.24	6.26	6.29	0.14	29.04	36.31	27.51	0.30	1.03	1.09	1.10	1.08	1.09
510.00	6.42	6.29	6.31	6.33	0.13	27.29	34.09	25.82	0.31	1.07	1.08	1.09	1.06	1.07
530.00	6.42	6.31	6.32	6.34	0.11	26.42	32.68	24.87	0.40	1.10	1.08	1.10	1.06	1.07
550.00	6.42	6.29	6.32	6.33	0.13	26.18	31.64	24.46	0.52	1.12	1.09	1.11	1.06	1.07
570.00	6.42	6.30	6.34	6.34	0.12	26.52	31.14	24.60	0.43	1.13	1.10	1.12	1.08	1.08
590.00	6.45	6.33	6.38	6.38	0.13	27.38	30.88	25.19	0.36	1.14	1.11	1.13	1.09	1.09
610.00	6.46	6.36	6.38	6.40	0.10	28.66	30.96	26.30	0.50	1.14	1.11	1.14	1.10	1.10
630.00	6.48	6.36	6.40	6.41	0.11	30.13	31.33	27.92	0.50	1.13	1.11	1.14	1.11	1.11
640.00	6.49	6.38	6.41	6.40	0.11	30.79	31.58	28.98	0.43	1.13	1.11	1.13	1.11	1.11
650.00	6.48	6.37	6.40	6.40	0.11	31.26	31.99	30.22	0.36	1.13	1.11	1.13	1.11	1.11
700.00	6.51	6.40	6.43	6.42	0.11	29.24	35.91	35.01	0.41	1.10	1.08	1.10	1.10	1.10

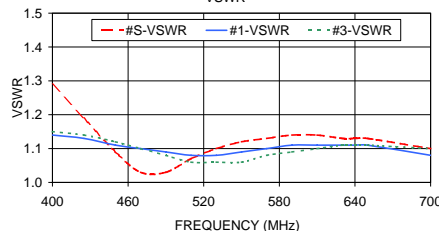
ZB4CS-700-10W INSERTION LOSS



ZB4CS-700-10W ISOLATION



ZB4CS-700-10W VSWR



electrical schematic



Mini-Circuits®
 ISO 9001 ISO 14001 AS 9100 CERTIFIED
 The Design Engineers Search Engine
 Provides ACTUAL Data Instantly at minicircuits.com

For detailed performance specs & shipping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

REV. A
 M94385
 ZB4CS-700-10W
 ED-8021
 HY/TD/CP
 090827