

Coaxial High Power Combiner

ZB4CS-870-10W

4 Way-0° 50Ω 570 to 870 MHz

Maximum Ratings

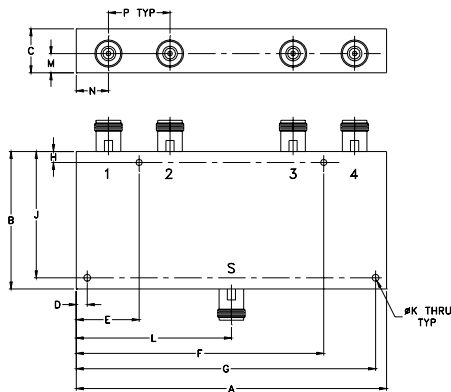
Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C

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

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, 0.3 dB typ.
- high isolation, 28 dB typ.
- good sum-port VSWR, 1.1 typ.
- good VSWR at ports 1-4, 1.15 typ.

Applications

- tv broadcast
- UHF

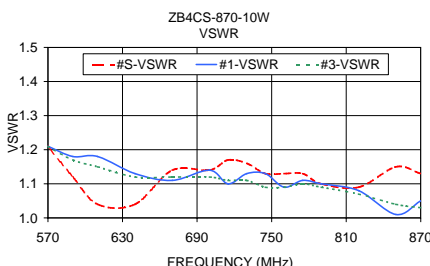
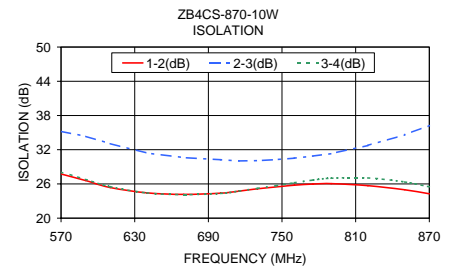
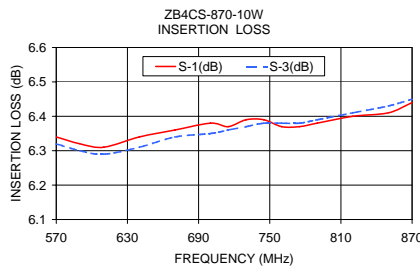
High Power Combiner Electrical Specifications

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.
570-870	28	20	0.35	0.8	0.6	3.0	0.1	0.3	10	20

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)	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						
570.00	6.34	6.36	6.32	6.31	0.05	27.74	35.22	28.08	0.61	1.21	1.21	1.19	1.21	1.22
590.00	6.32	6.34	6.30	6.29	0.05	26.60	34.35	26.81	0.65	1.12	1.18	1.16	1.17	1.16
610.00	6.31	6.34	6.29	6.29	0.05	25.37	33.07	25.51	0.64	1.04	1.18	1.16	1.15	1.15
640.00	6.34	6.37	6.31	6.30	0.07	24.43	31.43	24.43	0.63	1.04	1.13	1.11	1.12	1.15
670.00	6.36	6.39	6.34	6.32	0.06	24.17	30.62	24.13	0.65	1.14	1.11	1.09	1.12	1.14
700.00	6.38	6.41	6.35	6.34	0.07	24.38	30.25	24.34	0.64	1.14	1.14	1.11	1.12	1.12
715.00	6.37	6.41	6.36	6.34	0.06	24.73	30.04	24.75	0.67	1.17	1.10	1.10	1.11	1.09
730.00	6.39	6.42	6.37	6.36	0.07	25.15	30.09	25.23	0.71	1.16	1.13	1.13	1.11	1.09
745.00	6.39	6.42	6.38	6.36	0.06	25.47	30.27	25.69	0.67	1.13	1.13	1.09	1.09	1.10
760.00	6.37	6.42	6.38	6.35	0.07	25.78	30.53	26.21	0.71	1.13	1.09	1.11	1.09	1.10
775.00	6.37	6.42	6.38	6.36	0.07	25.98	30.89	26.68	0.71	1.13	1.11	1.10	1.10	1.11
790.00	6.38	6.43	6.39	6.36	0.07	26.06	31.32	27.01	0.76	1.10	1.10	1.06	1.09	1.11
820.00	6.40	6.45	6.41	6.39	0.07	25.70	32.76	27.06	0.80	1.09	1.08	1.05	1.07	1.07
850.00	6.41	6.47	6.43	6.39	0.07	24.97	34.63	26.35	0.91	1.15	1.01	1.07	1.04	1.04
870.00	6.44	6.51	6.45	6.42	0.09	24.28	36.25	25.50	0.91	1.13	1.05	1.01	1.03	1.01



electrical schematic



For detailed performance specs & shopping online see web site



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.

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