

Coaxial

High Power Combiner

ZB4CS-700-10W

4 Way-0° 50Ω

400 to 700 MHz

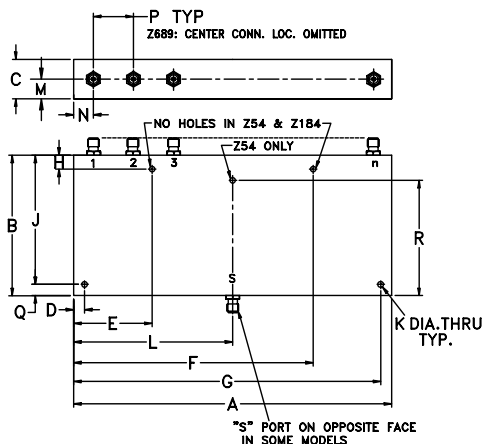
Maximum Ratings

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

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
7.11	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)

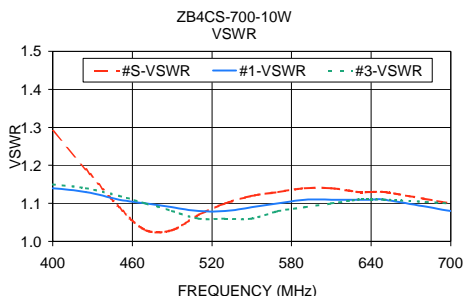
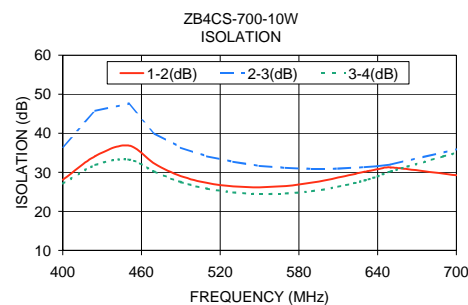
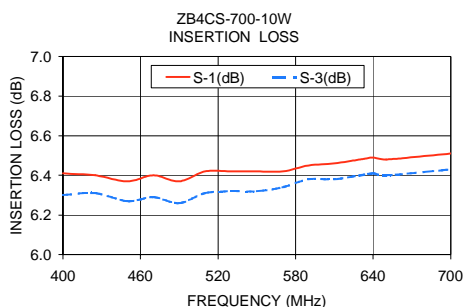
High Power Combiner Electrical Specifications

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

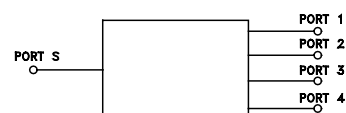
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C
2. As a combiner of non-coherent signals, max. power per port is power rating divided by number of ports.

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						
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



electrical schematic



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REV. A
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