

Coaxial High Power Combiner

ZB5CS-920-10W

5 Way-0° 50Ω 450 to 920 MHz

Maximum Ratings

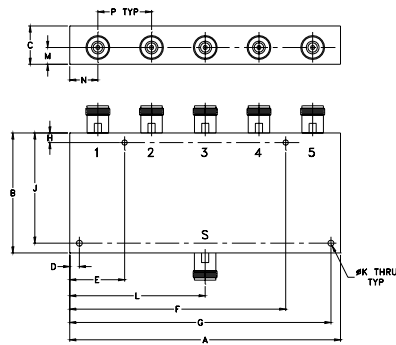
Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C

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

Outline Drawing



Outline Dimensions (inch/mm)

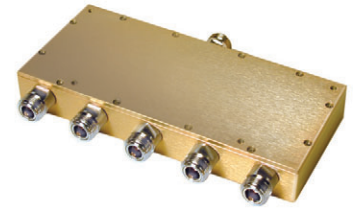
A	B	C	D	E	F	G	H
7.06	3.13	1.00	.250	1.430	5.630	6.810	.250
179.32	79.50	25.40	6.35	36.32	143.00	172.97	6.35
J	K	L	M	N	P		wt
2.875	.156	3.53	.44	.73	1.40		grams
73.03	3.96	89.66	11.18	18.54	35.56		854

Features

- high power, up to 10W input power
- low insertion loss, 0.4 dB typ.
- good isolation, 26 dB typ.
- excellent amplitude unbalance, 0.10 dB typ.

Applications

- UHF transmitters



CASE STYLE: Z668

Connectors	Model	Price	Qty.
N-TYPE	ZB5CS-920-10W-N	\$144.95	(1-9)

High Power Combiner Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 7.0 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 _U										
450-920	26	18	0.4	1.0	2.0	7.0	0.10	0.6	10	20

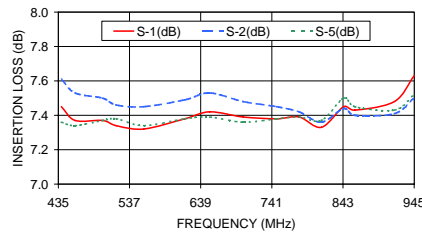
1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C

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

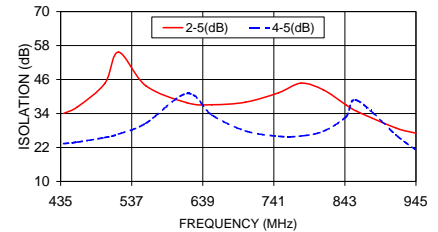
Typical Performance Data

Freq. (MHz)	Insertion Loss (dB)					Amp. Unbal. (dB)	Isolation (dB)				Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 5
	S-1	S-2	S-3	S-4	S-5		1-2	2-3	2-5	4-5				
439.33	7.45	7.61	7.23	7.33	7.36	0.38	29.85	32.97	34.05	23.36	5.06	1.32	1.20	1.16
459.00	7.37	7.53	7.16	7.32	7.34	0.37	31.52	34.93	36.31	23.92	4.66	1.28	1.20	1.18
498.33	7.37	7.50	7.19	7.35	7.37	0.30	29.76	29.48	44.62	25.53	4.19	1.15	1.18	1.22
518.00	7.34	7.46	7.19	7.37	7.38	0.27	27.66	26.83	55.67	26.74	3.84	1.09	1.16	1.22
557.33	7.32	7.45	7.21	7.34	7.34	0.24	24.77	23.59	43.79	30.54	3.18	1.05	1.12	1.22
616.33	7.38	7.49	7.31	7.39	7.38	0.18	23.71	22.17	37.80	41.07	2.57	1.18	1.07	1.19
652.00	7.42	7.53	7.39	7.40	7.39	0.14	24.41	22.54	37.11	33.51	2.46	1.21	1.07	1.16
700.00	7.39	7.48	7.41	7.38	7.36	0.12	26.49	24.03	37.97	27.88	2.21	1.17	1.07	1.11
748.00	7.38	7.45	7.44	7.42	7.38	0.07	28.55	26.09	41.36	25.95	1.98	1.08	1.07	1.07
780.00	7.39	7.42	7.48	7.43	7.39	0.10	28.16	26.88	44.71	26.07	1.42	1.03	1.05	1.08
812.00	7.33	7.36	7.47	7.41	7.37	0.14	26.76	26.96	42.35	27.75	1.23	1.04	1.03	1.09
844.00	7.45	7.44	7.62	7.55	7.50	0.18	25.33	26.69	37.12	32.70	1.76	1.05	1.02	1.11
860.00	7.43	7.40	7.63	7.51	7.45	0.23	24.48	26.32	34.76	38.68	2.16	1.05	1.02	1.12
916.67	7.48	7.41	7.77	7.51	7.43	0.36	21.01	23.61	28.84	26.36	3.08	1.19	1.02	1.11
945.00	7.63	7.50	7.98	7.59	7.52	0.48	18.59	20.84	27.05	21.17	3.45	1.40	1.02	1.09

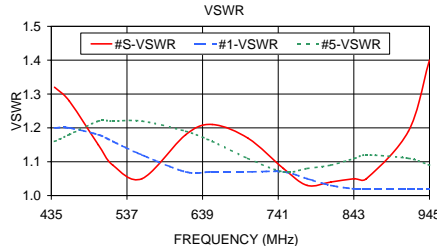
ZB5CS-920-10W INSERTION LOSS



ZB5CS-920-10W ISOLATION



ZB5CS-920-10W VSWR



electrical schematic



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