

Coaxial High Power Combiner

ZB4PD-232-50W+

4 Way-0° 50Ω 600 to 2300 MHz

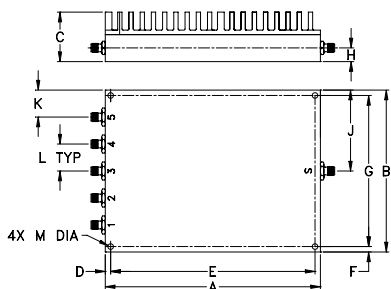
Maximum Ratings

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

Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	4
PORT 4	5

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
6.00	4.50	1.38	.15	5.700	.15	4.200
152.40	114.30	35.05	3.81	144.78	3.81	106.68
H	J	K	L	M		wt
.38	2.25	.75	.75	.156		grams
9.65	57.15	19.05	19.05	3.96		960

Features

- high isolation, 28 dB typ.
- good input matching VSWR, 1.20 typ.
- high power, 50W
- good output matching VSWR, 1.10:1 typ.

Applications

- cellular
- ISM
- WCDMA
- PCS
- DCS

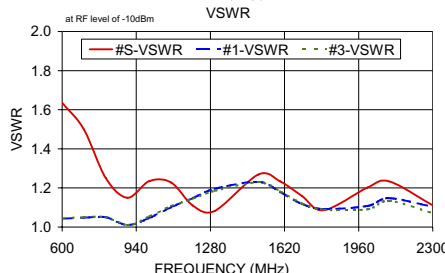
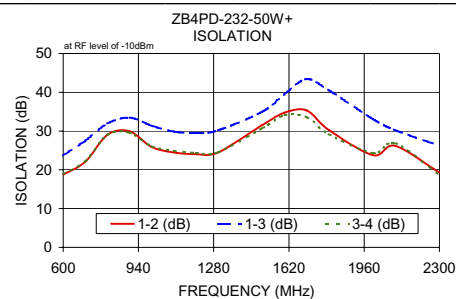
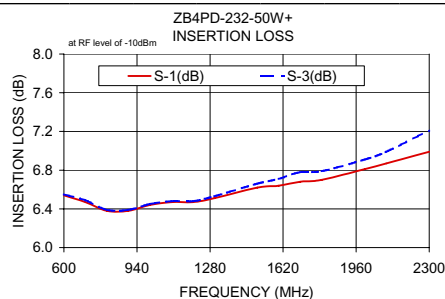
High Power Combiner Electrical Specifications

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.
600-2300	19	16	1.1	2.0	0.9	10.0	0.05	0.70	50	50
800-1000	28	22	0.5	0.8	1.2	4.0	0.05	0.30	50	50
1800-2000	28	20	0.9	1.4	2.5	6.0	0.15	0.50	50	50
2000-2300	28	16	1.2	2.0	4.0	10.0	0.25	0.70	50	50

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	1-3	3-4						
600.00	6.54	6.56	6.55	6.57	0.03	18.75	23.68	18.88	0.83	1.64	1.04	1.04	1.04	1.04
700.00	6.47	6.49	6.49	6.50	0.03	22.07	27.52	22.25	0.97	1.50	1.05	1.04	1.05	1.04
800.00	6.38	6.39	6.39	6.40	0.02	29.02	31.94	29.02	1.12	1.25	1.05	1.05	1.05	1.05
900.00	6.38	6.39	6.39	6.40	0.03	29.96	33.46	29.57	1.26	1.15	1.01	1.02	1.01	1.02
1000.00	6.44	6.45	6.45	6.46	0.02	25.87	31.39	26.04	1.39	1.23	1.05	1.04	1.05	1.04
1100.00	6.47	6.47	6.48	6.49	0.03	24.50	29.84	24.93	1.56	1.23	1.10	1.09	1.11	1.09
1200.00	6.47	6.48	6.48	6.50	0.03	24.01	29.45	24.35	1.76	1.11	1.15	1.14	1.15	1.13
1300.00	6.51	6.52	6.53	6.54	0.03	24.49	30.17	24.51	1.99	1.08	1.20	1.19	1.18	1.18
1500.00	6.62	6.63	6.66	6.68	0.05	31.54	35.00	30.74	2.50	1.27	1.23	1.24	1.23	1.24
1600.00	6.64	6.65	6.71	6.70	0.07	34.73	39.50	34.09	2.74	1.23	1.18	1.19	1.18	1.20
1700.00	6.68	6.71	6.78	6.76	0.10	35.32	43.37	33.57	2.74	1.16	1.12	1.12	1.12	1.14
1800.00	6.70	6.70	6.79	6.79	0.09	30.26	40.54	29.21	2.91	1.09	1.09	1.09	1.09	1.11
2000.00	6.81	6.80	6.91	6.91	0.11	23.76	33.07	24.33	3.44	1.20	1.11	1.08	1.09	1.07
2100.00	6.87	6.86	6.99	6.98	0.13	26.18	30.25	26.88	3.79	1.23	1.15	1.12	1.13	1.11
2300.00	6.99	6.99	7.21	7.18	0.22	19.30	26.23	18.78	4.83	1.11	1.10	1.12	1.07	1.09



electrical schematic



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