

# Coaxial Power Splitter/Combiner

## ZB4PD1-500-75+

4 Way-0° 75Ω 5 to 500 MHz

### Maximum Ratings

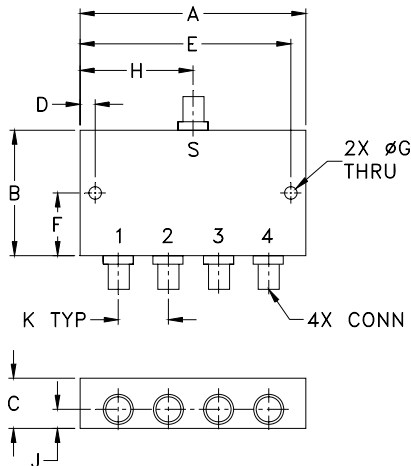
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.250W max.

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
3.50	2.13	.88	.150	3.350	1.06
88.90	54.10	22.35	3.81	85.09	26.92
G	H	J	K	wt	
.125	1.75	.44	.89	grams	
3.18	44.45	11.18	22.61	260	

### Features

- wideband, 5 to 500 MHz
- high isolation, 34 dB typ.
- rugged, shielded case

### Applications

- VHF/UHF
- receivers/transmitters
- communication systems



CASE STYLE: UU188

Connectors	Model
BNC	ZB4PD1-500-75+

**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Electrical Specifications

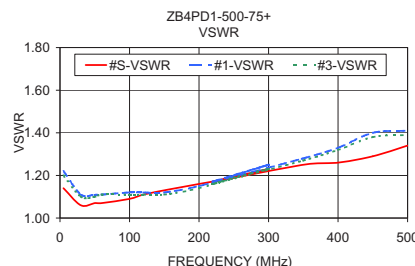
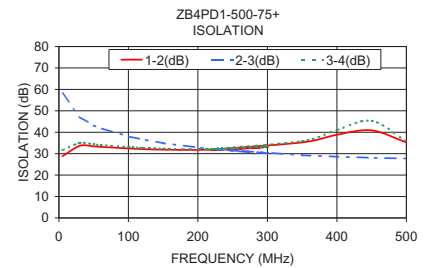
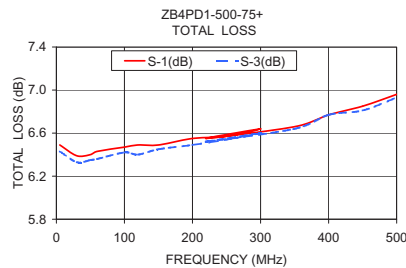
FREQ. RANGE (MHz)	ISOLATION (dB)			INSERTION LOSS (dB) ABOVE 6.0 dB			PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)								
	L	M	U	L	M	U	L	M	U	L	M	U						
$f_L$ - $f_U$	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.		
5-500	34	20	34	20	30	20	0.45	1.0	0.6	0.9	1.0	1.5	1	3	6	—	0.20	—

L = low range [ $f_L$  to  $10 f_L$ ] M = mid range [ $10 f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (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						
5.00	6.49	6.49	6.43	6.50	0.06	28.81	58.18	31.62	0.30	1.14	1.22	1.22	1.20	1.20
30.00	6.39	6.38	6.33	6.37	0.05	33.64	47.14	35.00	0.16	1.06	1.11	1.11	1.10	1.10
50.00	6.40	6.41	6.35	6.41	0.06	33.40	43.21	34.34	0.02	1.07	1.11	1.11	1.10	1.10
60.00	6.43	6.43	6.36	6.42	0.07	33.19	41.95	34.01	0.17	1.07	1.11	1.11	1.11	1.11
100.00	6.47	6.46	6.42	6.46	0.05	32.42	38.02	33.06	0.23	1.09	1.12	1.12	1.11	1.11
120.00	6.49	6.47	6.40	6.47	0.09	32.13	36.65	32.70	0.50	1.11	1.12	1.12	1.11	1.11
150.00	6.49	6.51	6.45	6.50	0.06	31.86	34.91	32.35	0.42	1.13	1.12	1.12	1.11	1.12
200.00	6.55	6.55	6.49	6.54	0.06	31.76	32.86	32.07	0.67	1.16	1.15	1.15	1.14	1.14
250.00	6.57	6.59	6.54	6.60	0.06	32.11	31.29	32.30	0.81	1.19	1.20	1.19	1.19	1.18
300.00	6.64	6.64	6.60	6.63	0.05	33.12	30.19	33.42	1.00	1.23	1.25	1.24	1.23	1.23
220.00	6.55	6.56	6.52	6.58	0.06	31.86	32.28	32.12	0.90	1.17	1.17	1.16	1.16	1.16
350.00	6.66	6.68	6.64	6.68	0.04	35.23	29.24	35.85	1.14	1.25	1.28	1.28	1.27	1.26
400.00	6.77	6.79	6.77	6.78	0.02	38.83	28.58	41.08	1.42	1.26	1.33	1.33	1.32	1.31
450.00	6.85	6.87	6.81	6.82	0.06	40.85	28.08	45.31	1.58	1.29	1.40	1.39	1.38	1.36
500.00	6.96	6.98	6.93	6.94	0.05	35.23	27.72	35.85	2.09	1.34	1.41	1.40	1.39	1.37

1. Total Loss = Insertion Loss + 6dB splitter loss.



### electrical schematic



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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