

Coaxial Power Splitter/Combiner

ZB4PD1-500+

4 Way-0° 50Ω 5 to 500 MHz

Maximum Ratings

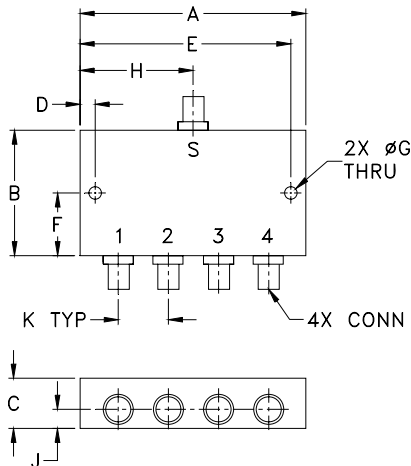
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.250W max.

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



SMA version shown
CASE STYLE: UU188

Connectors	Model
BNC	ZB4PD1-500+
SMA	ZB4PD1-500-S+
N-TYPE	ZB4PD1-500-N+

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

Electrical Specifications

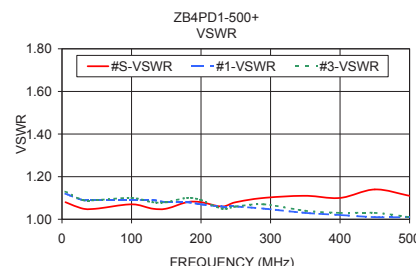
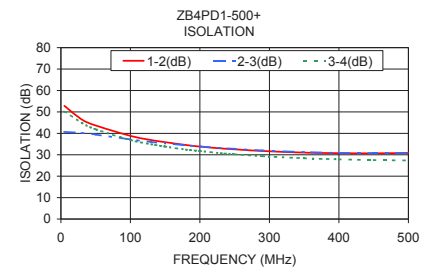
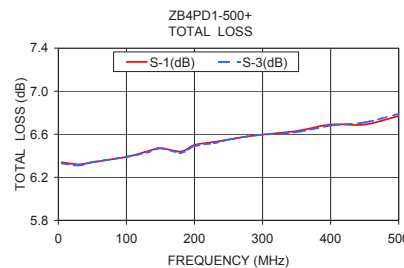
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 6.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
5-500	34	20	34	20	28	20	0.4	1.0	0.5	0.9	0.9	1.5	1	3	6	0.2	0.2	0.4

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 ¹ (dB)				Amp. Unbal. (dB)	Isolation (dB)			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	6.34	6.35	6.33		6.33	0.01	52.83					
30.00	6.32	6.32	6.31	6.32	0.01	46.48	40.23	44.89	1.05	1.09	1.09	1.09	1.09
50.00	6.34	6.34	6.34	6.35	0.01	43.68	39.45	41.92	1.05	1.09	1.09	1.09	1.10
100.00	6.39	6.39	6.39	6.38	0.01	38.83	37.13	36.88	1.07	1.09	1.10	1.10	1.10
130.00	6.44	6.43	6.43	6.43	0.01	36.86	35.97	34.90	1.05	1.09	1.08	1.08	1.08
150.00	6.47	6.46	6.47	6.46	0.01	35.87	35.35	33.83	1.05	1.08	1.08	1.08	1.08
180.00	6.44	6.44	6.43	6.43	0.01	34.55	34.35	32.40	1.08	1.08	1.09	1.10	1.10
200.00	6.50	6.51	6.49	6.48	0.03	33.82	33.88	31.75	1.08	1.07	1.07	1.09	1.09
230.00	6.53	6.54	6.52	6.51	0.03	32.96	33.12	30.74	1.06	1.06	1.04	1.05	1.05
250.00	6.55	6.56	6.55	6.53	0.03	32.54	32.76	30.22	1.08	1.06	1.06	1.06	1.06
290.00	6.59	6.59	6.59	6.58	0.02	31.75	32.00	29.34	1.10	1.05	1.05	1.07	1.07
350.00	6.63	6.64	6.62	6.60	0.04	31.02	31.24	28.37	1.11	1.03	1.04	1.04	1.04
400.00	6.69	6.72	6.68	6.67	0.05	30.73	30.84	27.85	1.10	1.02	1.01	1.03	1.03
450.00	6.69	6.72	6.71	6.67	0.05	30.66	30.70	27.53	1.14	1.01	1.01	1.03	1.03
500.00	6.77	6.81	6.79	6.75	0.06	30.85	30.77	27.37	1.11	1.01	1.02	1.01	1.02

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.
- The parts covered by this specification document 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/WCLStore/terms.jsp

