

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

Features

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

Applications

- VHF/UHF
- receivers/transmitters

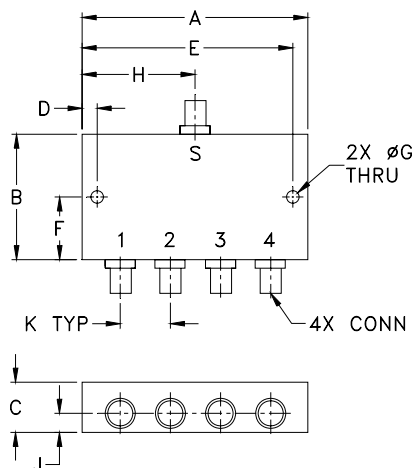
SMA version shown
CASE STYLE: UU188

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

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

Electrical Specifications

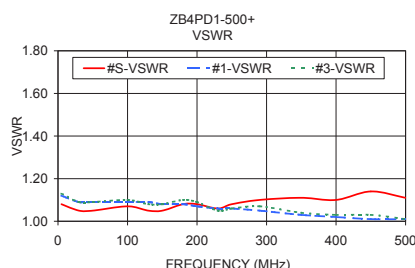
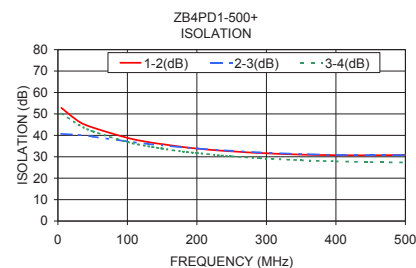
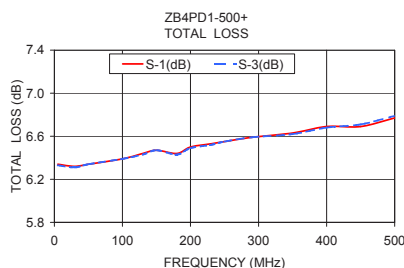
FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 6.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
5-500	34	20	34	20	28	20	0.4	1.0	0.5	0.9	0.9	1.5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

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