

DC Pass

# Power Splitter/Combiner

8 Way-0° 50Ω 2000 to 4200 MHz

ZB8PD-4+  
ZB8PD-4



SMA version shown  
CASE STYLE: Z41

Connectors	Model
SMA	ZB8PD-4-S+
N-TYPE	ZB8PD-4-N(+)

**+RoHS Compliant**

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

## Maximum Ratings

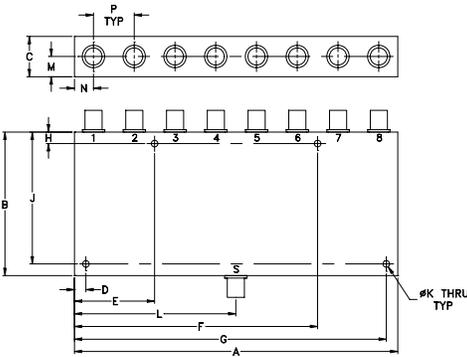
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.875W max.
DC Current	1.2A(150mA for each port)

Permanent damage may occur if any of these limits are exceeded.

## Coaxial Connections

SUM PORT	S
PORT 1,2,3,4,5,6,7,8	1,2,3,4,5,6,7,8

## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
7.06	3.13	.88	.250	1.750	5.310	6.810	.250
179.32	79.50	22.35	6.35	44.45	134.87	172.97	6.35
J	K	L	M	N	P	wt	
2.875	.144	3.53	.44	.415	.89	grams	
73.03	3.66	89.66	11.18	10.54	22.61	800	

## Features

- wideband, 2000 to 4200 MHz
- low insertion loss 0.8 dB typ.
- good isolation, 23 dB typ.
- rugged shielded case

## Applications

- UHF/SHF
- ISM
- MMDS
- terrestrial radio

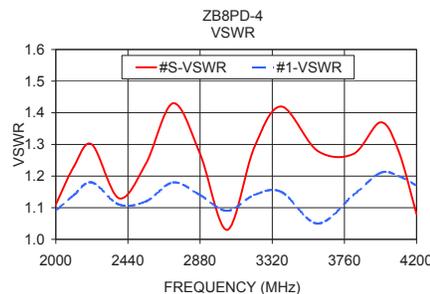
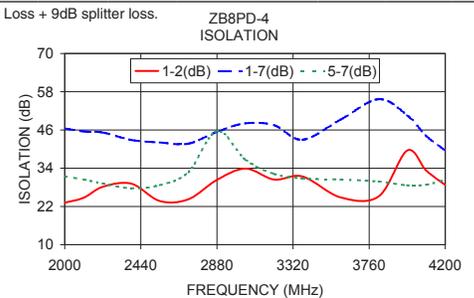
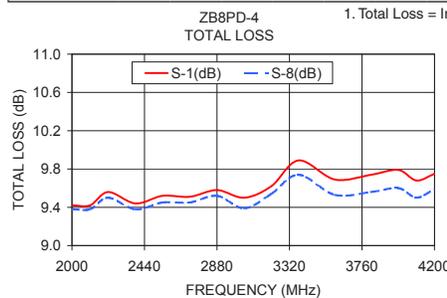
## Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 9.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.	Max.	Max.
2000-4200	23	16	0.8	1.8	10	1.2

## Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (dB)						Amplitude Unbalance (dB)	Isolation (dB)				VSWR S	VSWR 1	VSWR 8
	S-1	S-2	S-3	S-4	S-6	S-8		1-2	1-7	3-4	5-7			
2000.00	9.42	9.43	9.46	9.46	9.42	9.38	0.09	23.18	46.51	23.53	31.46	1.11	1.09	1.07
2110.00	9.42	9.46	9.51	9.54	9.47	9.38	0.16	24.74	45.55	25.33	30.44	1.23	1.14	1.13
2220.00	9.56	9.63	9.60	9.60	9.58	9.50	0.13	28.18	45.22	28.06	29.20	1.30	1.18	1.17
2385.00	9.44	9.51	9.53	9.49	9.48	9.38	0.14	29.15	42.87	29.43	27.71	1.13	1.11	1.10
2550.00	9.52	9.58	9.61	9.57	9.55	9.45	0.17	23.71	42.08	24.24	28.68	1.24	1.12	1.10
2715.00	9.51	9.56	9.61	9.53	9.58	9.45	0.16	24.27	41.71	24.57	32.76	1.43	1.18	1.15
2880.00	9.58	9.67	9.67	9.62	9.65	9.52	0.15	30.34	45.43	30.61	45.63	1.27	1.14	1.13
3045.00	9.50	9.59	9.63	9.56	9.59	9.39	0.25	33.87	48.09	34.38	36.67	1.03	1.09	1.08
3210.00	9.62	9.75	9.83	9.74	9.77	9.54	0.29	30.45	47.51	29.42	32.25	1.29	1.14	1.11
3375.00	9.89	10.01	10.05	9.89	9.99	9.74	0.31	31.40	42.95	29.02	30.79	1.42	1.15	1.14
3595.00	9.69	9.79	9.89	9.76	9.79	9.53	0.36	24.83	49.26	25.60	30.44	1.28	1.05	1.05
3815.00	9.74	9.81	9.90	9.77	9.84	9.56	0.35	25.18	55.65	26.99	29.84	1.27	1.14	1.11
3980.00	9.79	9.89	9.96	9.85	9.88	9.60	0.36	39.55	50.61	50.31	28.62	1.37	1.21	1.20
4090.00	9.68	9.79	9.85	9.72	9.75	9.50	0.35	33.25	44.11	33.20	28.82	1.28	1.20	1.17
4200.00	9.75	9.88	9.93	9.81	9.85	9.59	0.34	28.72	39.55	30.49	30.38	1.08	1.17	1.14

1. Total Loss = Insertion Loss + 9dB 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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