

DC Pass

# Power Splitter/Combiner

8 Way-0° 50Ω 1000 to 2000 MHz

## ZB8PD-2+



Generic photo used for illustration purposes only  
CASE STYLE: Z41

Connectors	Model
SMA	ZB8PD-2-S+
N-TYPE	ZB8PD-2-N+

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

### Maximum Ratings

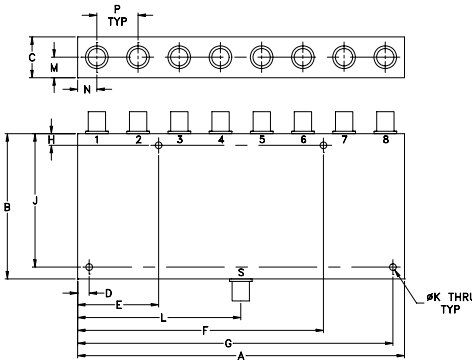
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.875W max.
DC Current	1.2A(150mA for each port)

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, 1000 to 2000 MHz
- low insertion loss, 0.8 dB typ.
- good isolation, 24 dB typ.
- up to 10W power input as splitter

### Applications

- GPS
- PCS/DCS
- communication systems
- instrumentation

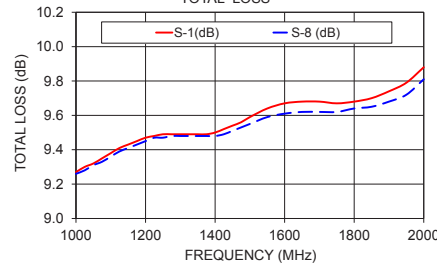
### Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 9.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.	Max.	Max.
f <sub>L</sub> -f <sub>U</sub>						
1000-2000	24	17	0.8	1.3	18	0.8

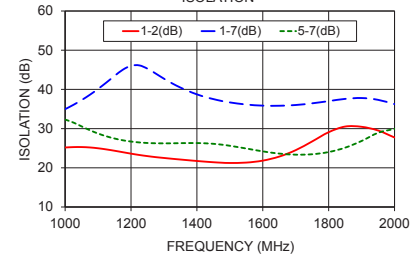
### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)						Amp. Unb. (dB)	Isolation (dB)				Phase Unb. (deg.)	VSWR S	VSWR 1	VSWR 7
	S-1	S-2	S-3	S-4	S-6	S-8		1-2	1-7	3-4	5-7				
1000.00	9.27	9.44	9.41	9.22	9.42	9.26	0.21	25.18	34.96	24.73	32.31	3.71	1.23	1.28	1.11
1050.00	9.32	9.48	9.45	9.27	9.47	9.31	0.20	25.29	37.28	24.99	30.56	3.95	1.34	1.29	1.13
1100.00	9.38	9.52	9.49	9.33	9.52	9.36	0.19	24.98	40.13	24.89	28.74	4.22	1.42	1.29	1.14
1200.00	9.47	9.58	9.56	9.43	9.57	9.45	0.15	23.61	46.04	23.80	26.70	4.72	1.52	1.26	1.13
1250.00	9.49	9.58	9.56	9.46	9.57	9.47	0.12	22.98	45.29	23.18	26.33	4.96	1.51	1.25	1.12
1300.00	9.49	9.56	9.54	9.46	9.55	9.48	0.09	22.51	42.73	22.68	26.24	5.18	1.47	1.24	1.11
1400.00	9.50	9.51	9.51	9.48	9.50	9.48	0.03	21.74	38.74	21.81	26.31	5.59	1.37	1.24	1.10
1500.00	9.59	9.54	9.52	9.57	9.52	9.55	0.09	21.23	36.68	21.24	25.62	5.87	1.43	1.23	1.08
1600.00	9.67	9.55	9.53	9.66	9.54	9.61	0.19	21.83	35.86	21.81	24.19	6.07	1.52	1.18	1.06
1700.00	9.68	9.49	9.48	9.70	9.51	9.62	0.28	24.50	36.02	24.45	23.35	6.27	1.47	1.07	1.11
1750.00	9.67	9.46	9.46	9.72	9.48	9.62	0.32	26.73	36.45	26.75	23.46	6.38	1.44	1.02	1.15
1800.00	9.68	9.44	9.45	9.75	9.47	9.64	0.36	29.08	37.01	29.40	24.02	6.45	1.41	1.05	1.18
1900.00	9.74	9.44	9.45	9.81	9.46	9.68	0.41	30.46	37.80	31.63	26.84	6.42	1.37	1.12	1.20
1950.00	9.79	9.46	9.47	9.85	9.47	9.72	0.43	29.52	37.34	30.46	28.92	6.35	1.38	1.14	1.21
2000.00	9.88	9.54	9.54	9.93	9.54	9.81	0.45	27.73	36.24	28.25	29.93	6.42	1.47	1.16	1.24

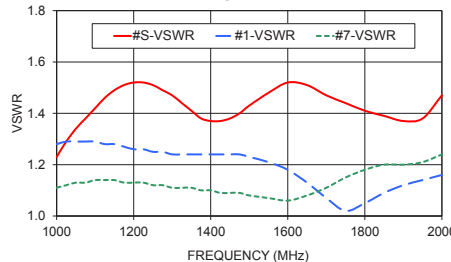
ZB8PD-2-S+ TOTAL LOSS



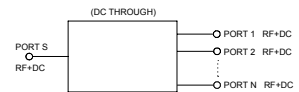
ZB8PD-2-S+ ISOLATION



ZB8PD-2-S+ VSWR



### 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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