

Power Splitter/Combiner

8 Way-0° 50Ω 7200 to 8400 MHz

ZB8PD-8.4



Generic photo used for illustration purposes only

SMA version shown
CASE STYLE: Z41

Connectors	Model
SMA	ZB8PD-8.4-S
N-TYPE	ZB8PD-8.4-N

Maximum Ratings

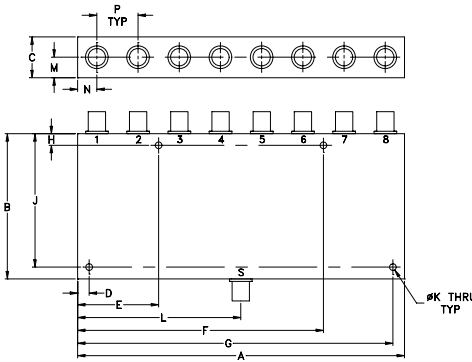
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.875W max.
DC Current	1.2A(150mA for each port)

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, 7200 to 8400 MHz
- low insertion loss 0.9 dB typ.
- good isolation, 25 dB typ.
- up to 10 power input
- rugged shielded case

Applications

- SHF
- defense communication
- cable TV relay
- instrumentation

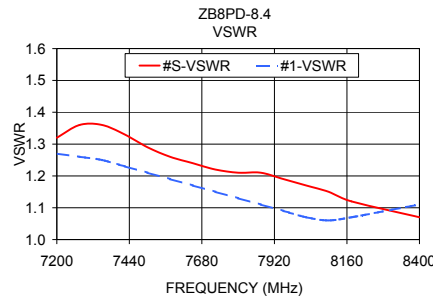
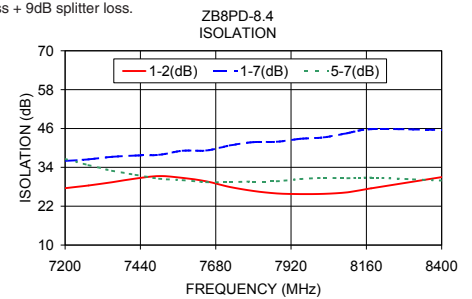
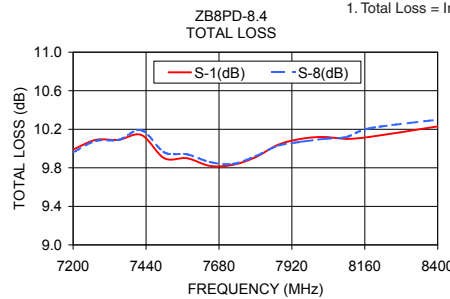
Electrical Specifications

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_L - f_U						
7200-8400	25	20	0.9	1.6	15	0.8

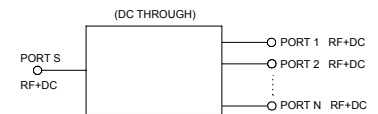
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (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			
	7200.00	9.99	9.86	9.89	9.97	9.90		9.96	0.13	27.56	35.97			
7275.00	10.09	9.98	10.01	10.05	10.01	10.08	0.11	28.39	36.47	25.75	34.71	1.36	1.26	1.23
7350.00	10.09	9.98	10.03	10.02	10.05	10.09	0.12	29.42	37.25	26.64	32.95	1.36	1.25	1.22
7425.00	10.14	10.04	10.09	10.09	10.14	10.19	0.15	30.53	37.66	27.75	31.69	1.33	1.23	1.20
7500.00	9.90	9.80	9.84	9.84	9.91	9.96	0.15	31.30	37.87	28.82	30.49	1.29	1.21	1.18
7575.00	9.90	9.80	9.82	9.82	9.88	9.94	0.14	30.74	39.13	29.46	30.06	1.26	1.19	1.15
7650.00	9.82	9.72	9.74	9.72	9.77	9.86	0.14	29.68	39.20	28.73	29.43	1.24	1.17	1.14
7725.00	9.83	9.73	9.74	9.75	9.74	9.84	0.11	27.93	40.74	27.66	29.46	1.22	1.15	1.10
7800.00	9.91	9.81	9.81	9.81	9.80	9.92	0.14	26.71	41.79	26.33	29.64	1.21	1.13	1.09
7875.00	10.04	9.92	9.91	9.92	9.90	10.03	0.16	25.94	41.90	25.43	29.70	1.21	1.11	1.08
7950.00	10.10	9.99	9.96	9.98	9.95	10.07	0.17	25.75	42.81	24.95	30.40	1.19	1.09	1.07
8025.00	10.12	10.02	9.96	10.00	9.98	10.10	0.17	25.81	43.25	25.16	30.74	1.17	1.07	1.05
8100.00	10.10	10.00	9.95	9.99	9.96	10.12	0.16	26.29	44.56	25.49	30.63	1.15	1.06	1.04
8175.00	10.12	10.01	9.98	10.01	9.96	10.21	0.25	27.52	45.80	26.55	30.81	1.12	1.07	1.03
8400.00	10.23	10.13	10.18	10.29	10.13	10.30	0.18	30.99	45.55	33.14	29.92	1.07	1.11	1.04

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.
- The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at www.minicircuits.com/WCLStore/terms.jsp

