

Power Splitter/Combiner

ZB8PD-6.4

8 Way-0° 50Ω 5600 to 6800 MHz



Maximum Ratings

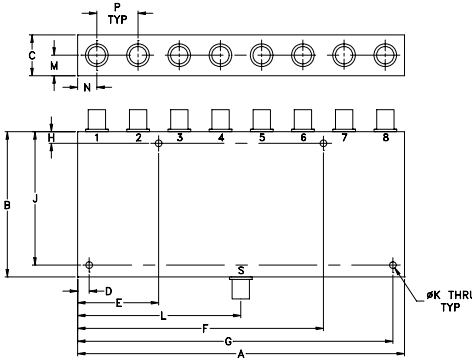
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.875W max.
DC Current	1.2A(150mA for each port)

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, 5600 to 6800 MHz
- low insertion loss 0.8 dB typ.
- good isolation, 23 dB typ.
- up to 10 power input
- rugged shielded case

Applications

- SHF
- defense communication
- cable TV relay
- instrumentation

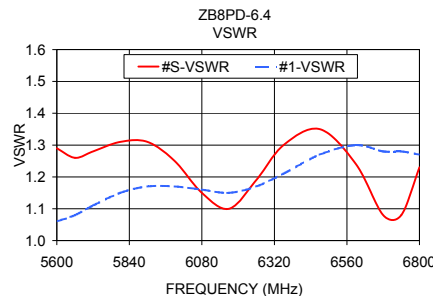
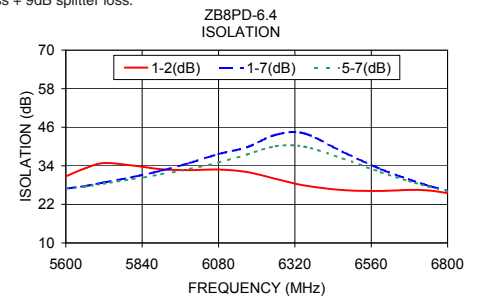
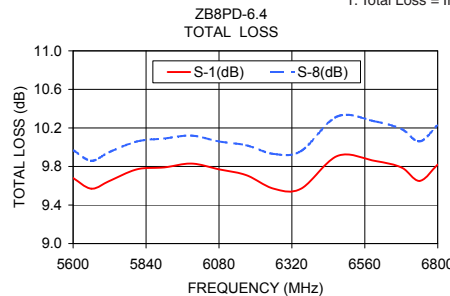
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 9.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.		
f _L -f _H					Max.	Max.
5600-6800	23	18	0.8	1.7	15	0.7

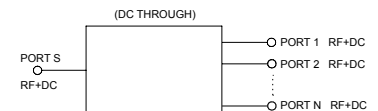
Typical Performance Data

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	1-2	1-7	3-4	5-7			
5600.00	9.68	9.81	9.83	9.79	9.84	9.97	0.29	30.74	26.92	31.08	26.94	1.29	1.06	1.07			
5660.00	9.57	9.70	9.72	9.70	9.72	9.86	0.29	33.18	27.70	33.96	27.55	1.26	1.08	1.10			
5720.00	9.65	9.75	9.79	9.78	9.77	9.95	0.30	34.84	28.81	36.63	28.48	1.28	1.11	1.12			
5810.00	9.77	9.85	9.85	9.89	9.86	10.06	0.29	34.09	30.51	36.68	29.84	1.31	1.15	1.15			
5900.00	9.79	9.88	9.85	9.93	9.86	10.09	0.30	32.95	32.49	34.69	31.39	1.31	1.17	1.16			
5990.00	9.83	9.93	9.87	10.00	9.88	10.12	0.30	32.66	34.91	33.36	33.05	1.25	1.17	1.15			
6080.00	9.77	9.89	9.84	9.96	9.79	10.06	0.29	32.84	37.66	32.30	35.02	1.15	1.16	1.14			
6170.00	9.71	9.87	9.80	9.92	9.73	10.02	0.31	32.05	39.79	30.84	37.54	1.10	1.15	1.13			
6260.00	9.57	9.69	9.65	9.80	9.59	9.93	0.36	29.92	43.65	28.77	40.11	1.19	1.17	1.14			
6350.00	9.57	9.66	9.64	9.80	9.59	9.96	0.39	27.90	44.08	27.26	39.95	1.30	1.21	1.18			
6470.00	9.91	9.98	9.97	10.14	9.90	10.32	0.42	26.45	38.35	26.27	36.28	1.35	1.27	1.24			
6590.00	9.86	9.92	9.91	10.04	9.86	10.27	0.42	26.19	32.97	26.42	32.02	1.24	1.30	1.27			
6680.00	9.79	9.83	9.80	9.92	9.77	10.19	0.41	26.51	29.69	26.91	29.22	1.08	1.28	1.26			
6740.00	9.65	9.74	9.68	9.80	9.65	10.06	0.41	26.33	27.82	26.64	27.52	1.08	1.28	1.26			
6800.00	9.82	9.87	9.81	9.90	9.80	10.23	0.43	25.49	26.22	25.51	26.12	1.23	1.27	1.25			

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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