

Power Splitter/Combiner

ZAPD-50W+

2 Way-0° 50Ω 4200 to 6000 MHz

Maximum Ratings

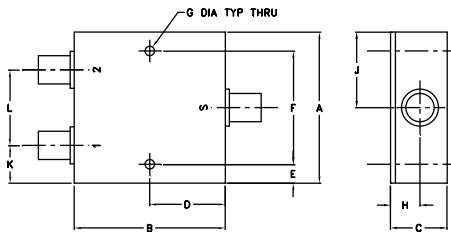
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.125W max.
DC Current	500 mA (250mA for each port)

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

Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
2.00	2.00	0.75	1.00	0.25	1.500	0.125
50.80	50.80	19.05	25.40	6.35	38.10	3.18
H	J	K	L	wt		
0.39	1.00	0.50	1.00	grams		
9.91	25.40	12.70	25.40	170.0		

Features

- low insertion loss, 0.3 dB typ.
- good isolation, 26 dB typ.
- up to 10W power input as splitter
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 1 deg. typ.
- excellent VSWR, 1.15:1 typ.
- rugged shielded case

Applications

- wireless
- defense
- communications

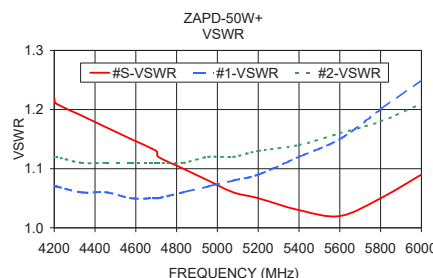
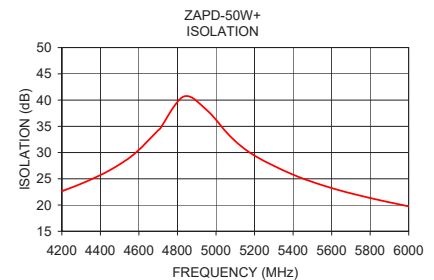
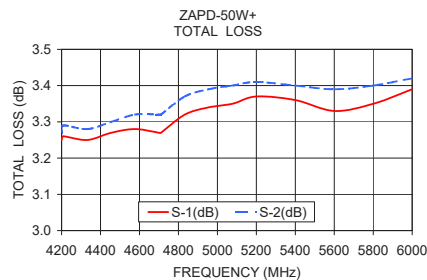
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)			
	Typ.	Min.	Typ.	Max.			S		OUT	
f_L - f_U					Max.	Max.	Typ.	Max.	Typ.	Max.
4200-6000	26	16	0.3	0.8	5	0.7	—	—	—	—

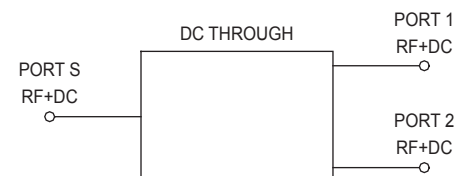
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2					
4200.00	3.25	3.27	0.02	22.67	1.22	1.07	1.12
4210.00	3.26	3.29	0.03	22.77	1.21	1.07	1.12
4332.50	3.25	3.28	0.03	24.57	1.19	1.06	1.11
4455.00	3.27	3.30	0.04	26.77	1.17	1.06	1.11
4577.50	3.28	3.32	0.04	29.78	1.15	1.05	1.11
4700.00	3.27	3.32	0.05	34.24	1.13	1.05	1.11
4710.00	3.27	3.32	0.06	34.56	1.12	1.05	1.11
4832.50	3.32	3.37	0.05	40.68	1.10	1.06	1.11
4955.00	3.34	3.39	0.05	37.99	1.08	1.07	1.12
5077.50	3.35	3.40	0.05	32.96	1.06	1.08	1.12
5200.00	3.37	3.41	0.04	29.43	1.05	1.09	1.13
5400.00	3.36	3.40	0.04	25.79	1.03	1.12	1.14
5600.00	3.33	3.39	0.06	23.24	1.02	1.15	1.16
5800.00	3.35	3.40	0.06	21.34	1.05	1.20	1.18
6000.00	3.39	3.42	0.04	19.75	1.09	1.25	1.21

1. Total Loss = Insertion Loss + 3dB splitter loss.



electrical schematic



Notes

- A. 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.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
 C. The parts covered by this specification document are subject to Mini-Circuits 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-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



Generic photo used for illustration purposes only

CASE STYLE: F14

Connectors	Model
N-TYPE	ZAPD-50W-N+

+RoHS Compliant

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