

Coaxial High Power Combiner

ZAPD-2-21-3W

2 Way-0° 50Ω 700 to 2100 MHz

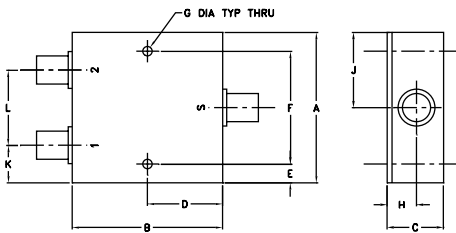
Maximum Ratings

Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C

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	.75	1.00	.13	1.750	.125		
50.80	50.80	19.05	25.40	3.30	44.45	3.18		
H	J	K	L				wt	
.39	1.00	.50	1.00				grams	
9.91	25.40	12.70	25.40				170.0	

Features

- wideband, 700-2100 MHz
- low insertion loss, 0.4 dB typ.
- good isolation, 25 dB typ.
- good amplitude unbalance, 0.05 dB typ. and phase unbalance, 0.7 deg. typ.

Applications

- LMDS • UHF
- VSAT • PCS
- GPS • cellular



SMA version shown

CASE STYLE: F53

Connectors	Model	Price	Qty.
N-TYPE	ZAPD-2-21-3W-N	\$54.95	(1-9)
SMA	ZAPD-2-21-3W-S	\$54.95	(1-9)

High Power Combiner Electrical Specifications

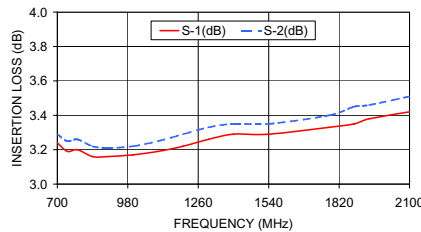
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		POWER INPUT ¹ (W)	
	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	as combiner ² Max.	as splitter Max.
f _L -f _U	25	20	0.4	1.2	0.7	3.0	0.05	0.3	2.5	10

1. Over -55°C to +55°C. Derate linearly to 20% of rating at 90°C
2. As a combiner of non-coherent signals, max. power per port is power rating divided by number of ports.

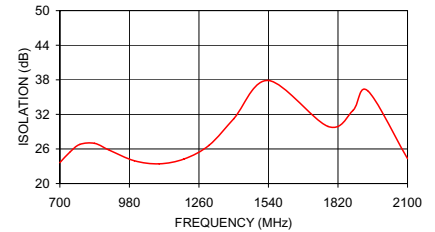
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Amp. Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
700.00	3.24	3.29	0.05	23.63	0.45	1.36	1.18	1.19
740.00	3.19	3.25	0.06	25.44	0.45	1.29	1.18	1.19
780.00	3.20	3.26	0.05	26.79	0.48	1.26	1.17	1.18
840.00	3.16	3.22	0.05	26.97	0.51	1.16	1.15	1.16
900.00	3.16	3.21	0.05	25.78	0.56	1.10	1.13	1.13
1000.00	3.17	3.22	0.05	23.95	0.64	1.02	1.11	1.11
1100.00	3.19	3.25	0.06	23.43	0.61	1.10	1.12	1.11
1200.00	3.22	3.29	0.06	24.26	0.75	1.18	1.15	1.15
1300.00	3.26	3.33	0.06	26.61	0.81	1.22	1.18	1.18
1400.00	3.29	3.35	0.06	31.24	0.86	1.23	1.18	1.18
1540.00	3.29	3.35	0.06	37.88	0.94	1.19	1.13	1.13
1780.00	3.33	3.40	0.08	29.91	1.10	1.16	1.12	1.08
1880.00	3.35	3.45	0.09	32.67	1.15	1.19	1.16	1.12
1940.00	3.38	3.46	0.09	36.09	1.16	1.19	1.17	1.13
2100.00	3.42	3.51	0.09	24.32	1.31	1.11	1.12	1.09

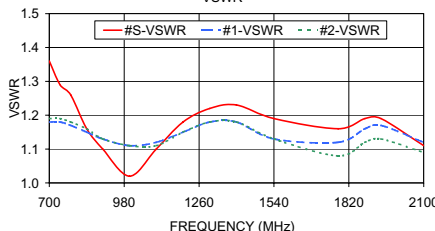
ZAPD-2-21-3W INSERTION LOSS



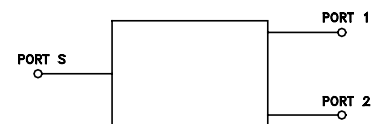
ZAPD-2-21-3W ISOLATION



ZAPD-2-21-3W VSWR



electrical schematic



Mini-Circuits®
ISO 9001 ISO 14001 CERTIFIED

ALL NEW
minicircuits.com

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS

REV. OR
M94385
ED-5741C/1
ZAPD-2-21-3W
HY/TD/CP
080714