

DC Pass High Power Combiner

ZAPD-2-21-3W+

2 Way-0° 50Ω 700 to 2100 MHz

Maximum Ratings

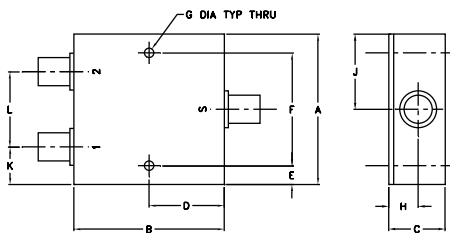
Operating Temperature	-55°C to 90°C
Storage Temperature	-55°C to 100°C
DC Current	500 mA (250mA for each port)

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	.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



Generic photo used for illustration purposes only

CASE STYLE: F53

Connectors	Model
N-TYPE	ZAPD-2-21-3W-N+
SMA	ZAPD-2-21-3W-S+

+RoHS Compliant

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

High Power Combiner Electrical Specifications

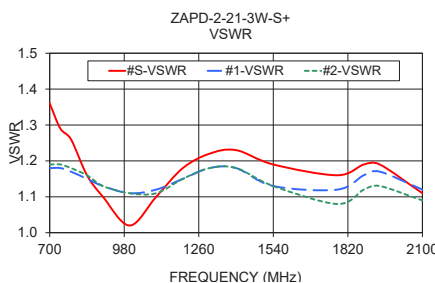
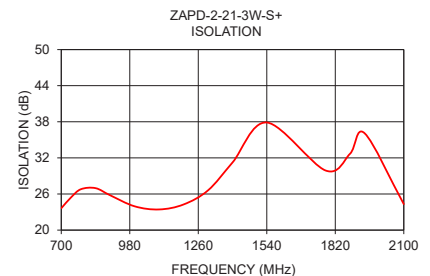
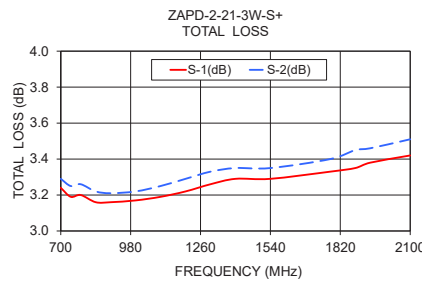
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)		AMPLITUDE UNBALANCE (dB)		POWER INPUT ¹ (W)	
	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	as combiner ² Max.	as splitter Max.
700-2100	25	20	0.4	1.2	0.7	3.0	0.05	0.3	2.5	10

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

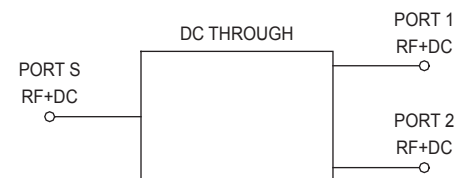
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (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

1. Total Loss = Insertion Loss + 3dB 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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