

High Power Power Splitter/Combiner

2 Way-180° 50Ω 10 to 520 MHz

ZAPDJ2-5W-521+

Maximum Ratings

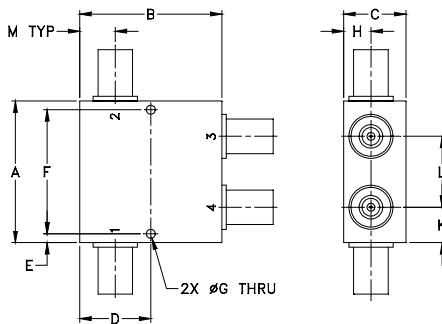
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	5W
Internal Dissipation	1W

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

Coaxial Connections

SUM PORT	1
PORT 1 (0°)	4
PORT 2 (180°)	3
NOTE USED	2

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
2.00	2.00	.88	1.000	0.13	1.750	0.125
50.80	50.80	22.35	25.40	3.30	44.45	3.18

H	J	K	L	M	wt
0.38	--	0.50	1.00	0.50	grams
9.65	--	12.70	25.40	12.70	250.0

Electrical Schematic

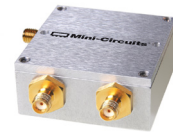


Features

- wideband, 10 to 520 MHz
- low phase unbalance, 2 deg. typ.
- low amplitude unbalance, 0.1 dB typ.
- high isolation, 23 dB typ.
- high input power as a splitter, 5.0 W

Applications

- VHF/UHF
- communication systems
- receivers & transmitters
- instrumentation
- CATV



SMA version shown

CASE STYLE: JD1252

Connectors	Model
SMA	ZAPDJ2-5W-521S+
N-Type	ZAPDJ2-5W-521N+

+RoHS Compliant

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

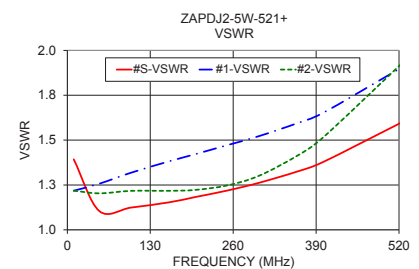
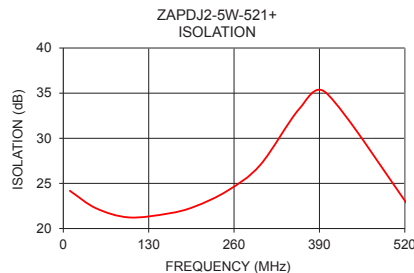
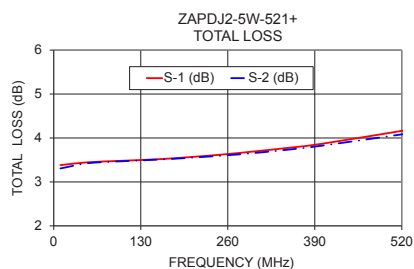
Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency		10		520	MHz
Insertion Loss (above theoretical 3.0 dB)	10 - 250	—	0.5	0.9	dB
	250 - 520	—	0.9	1.5	dB
Isolation	10 - 250	17	22	—	dB
	250 - 520	18	24	—	dB
Phase Unbalance	10 - 250	—	2.0	8.0	Degree
	250 - 520	—	2.0	10	Degree
Amplitude Unbalance	10 - 250	—	0.05	0.2	dB
	250 - 520	—	0.1	0.35	dB
VSWR (Port S)	10 - 250	—	1.4	1.55	:1
	250 - 520	—	1.5	1.95	:1
VSWR (Port 1-2)	10 - 250	—	1.35	1.65	:1
	250 - 520	—	1.6	2.3	:1
Input Power	as splitter	10 - 520	—	5.0	W
	as combiner	10 - 520	—	1.0	W

Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)	Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1 S-2						
10	3.38 3.31	0.08	24.18	179.96	1.39	1.22	1.22
50	3.45 3.42	0.02	22.24	179.43	1.10	1.26	1.20
100	3.48 3.47	0.01	21.23	179.08	1.12	1.32	1.22
160	3.52 3.51	0.01	21.67	178.76	1.15	1.38	1.22
200	3.56 3.55	0.01	22.43	178.60	1.18	1.42	1.22
250	3.62 3.60	0.02	24.19	178.48	1.22	1.47	1.25
300	3.69 3.66	0.04	27.05	178.46	1.26	1.52	1.30
360	3.79 3.75	0.04	33.32	178.69	1.32	1.59	1.41
400	3.87 3.82	0.04	35.05	179.07	1.38	1.65	1.51
525	4.17 4.09	0.08	22.57	178.05	1.60	1.91	1.93

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



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-Circuits' applicable established test performance criteria and measurement instructions.
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