

Coaxial

# Power Splitter/Combiner

## ZAPD-2-252+

2 Way-0° 50Ω 5 to 2500 MHz



Generic photo used for illustration purposes only  
CASE STYLE: F14

Connectors	Model
N-TYPE	ZAPD-2-252-N+
SMA	ZAPD-2-252-S+

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

### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.04W max.

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

### Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2

### Features

- wideband, 5 to 2500 MHz, useable from 0.5 to 3000 MHz
- low insertion loss, 1.0 dB typ.
- excellent amplitude unbalance, 0.2 dB typ.
- excellent phase unbalance, 2 deg. typ.
- rugged shielded case

### Applications

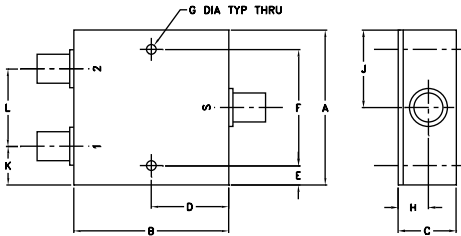
- VHF/UHF
- PCS
- GPS
- cellular
- instrumentation

### Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)			VSWR (:1)			
	L		M		U		L		M		U		L	M	U	L	M	U	S		OUT	
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.	Typ.	Max.	Typ.	Max.
5-2500	25	19	17	14	17	14	0.3	0.6	0.8	1.7	1.5	2.4	2	3	5	0.2	0.4	0.6	1.6	—	1.3	—

L = low range [ $f_L$  to  $10 f_L$ ] M = mid range [ $10 f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

### 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

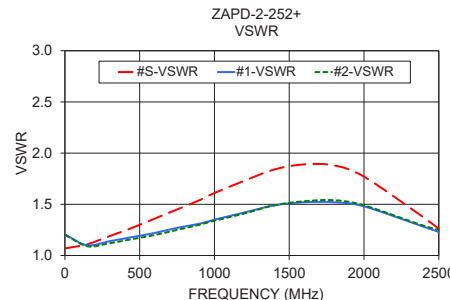
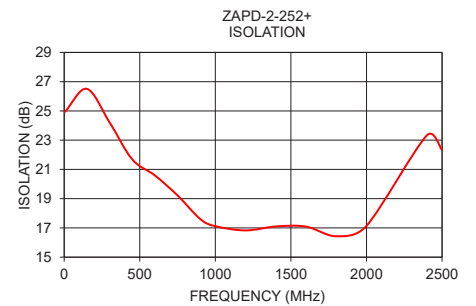
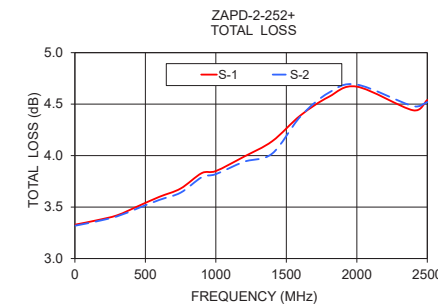
H	J	K	L	wt
0.39	1.00	0.50	1.00	grams
9.91	25.40	12.70	25.40	170.0

For option B with N-type connectors, dimension "C" increases to 0.94 inches.

### Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
5.00	3.33	3.32	0.01	24.94	0.03	1.07	1.20	1.20
150.00	3.37	3.36	0.02	26.51	0.08	1.11	1.10	1.09
300.00	3.42	3.41	0.01	24.22	0.06	1.19	1.14	1.12
450.00	3.51	3.49	0.02	21.69	0.12	1.27	1.18	1.16
600.00	3.60	3.57	0.03	20.59	0.19	1.36	1.22	1.20
750.00	3.68	3.64	0.04	19.22	0.26	1.45	1.27	1.25
900.00	3.83	3.79	0.04	17.61	0.24	1.54	1.31	1.30
1000.00	3.85	3.82	0.02	17.12	0.41	1.61	1.35	1.34
1200.00	3.99	3.94	0.05	16.83	0.08	1.73	1.42	1.41
1400.00	4.14	4.02	0.13	17.10	1.12	1.84	1.49	1.49
1600.00	4.39	4.38	0.01	17.09	1.56	1.89	1.52	1.53
1800.00	4.57	4.61	0.04	16.43	2.12	1.88	1.52	1.54
2000.00	4.67	4.69	0.02	17.14	2.02	1.77	1.48	1.49
2400.00	4.44	4.48	0.03	23.33	2.38	1.37	1.28	1.29
2500.00	4.54	4.52	0.02	22.33	2.12	1.26	1.23	1.25

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.
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