

# Power Splitter/Combiner

## ZAPD-1+

2 Way-0° 50Ω 500 to 1000 MHz



Generic photo used for illustration purposes only

N-Type version shown

CASE STYLE: F14

Connectors	Model
BNC	ZAPD-1+
SMA	ZAPD-1-S+
N-TYPE	ZAPD-1-N+

**+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)	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

### Features

- wideband, 500 to 1000 MHz
- low insertion loss, 0.25 dB typ.
- good isolation, 25 dB typ.
- up to 10W power input as splitter
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 0.2 deg. typ.
- excellent VSWR, 1.1:1 typ.
- rugged shielded case

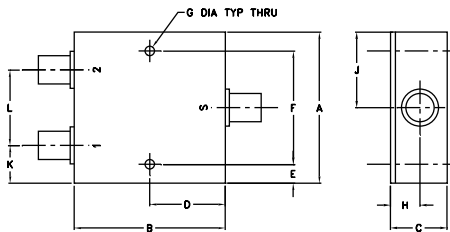
### Applications

- UHF
- cellular
- communications systems
- instrumentation

### Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min	Typ.	Max.	Max.	Max.
$f_c - f_u$						
500-1000	25	19	0.25	0.6	2	0.2

### Outline Drawing



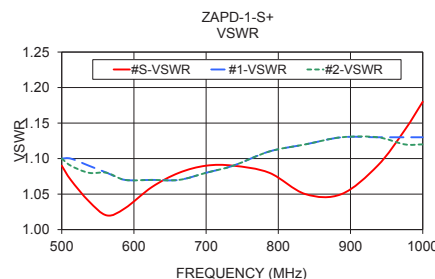
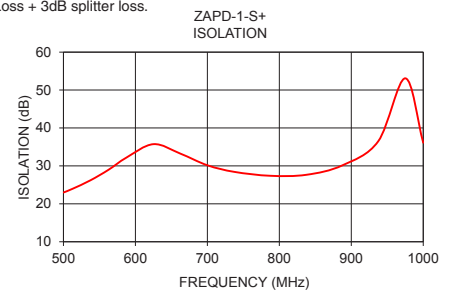
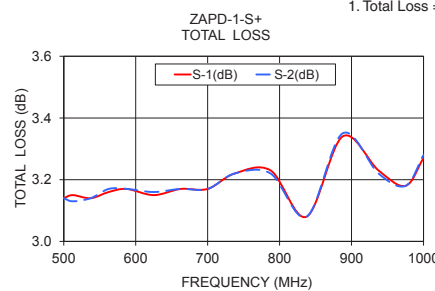
### Outline Dimensions (inch/mm)

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

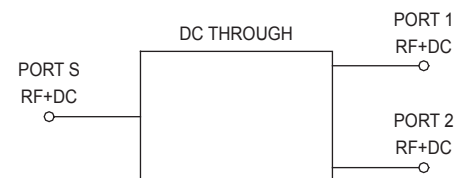
### Typical Performance Data

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						
500.00	3.14	3.14	0.00	22.98	0.10	1.09	1.10	1.10
512.50	3.15	3.13	0.02	23.95	0.07	1.07	1.10	1.09
537.50	3.14	3.14	0.00	26.20	0.02	1.04	1.09	1.08
562.50	3.16	3.17	0.01	28.96	0.07	1.02	1.08	1.08
587.50	3.17	3.17	0.00	32.19	0.13	1.03	1.07	1.07
625.00	3.15	3.16	0.00	35.73	0.08	1.06	1.07	1.07
662.50	3.17	3.17	0.00	33.23	0.13	1.08	1.07	1.07
700.00	3.17	3.17	0.00	30.16	0.09	1.09	1.08	1.08
737.50	3.22	3.22	0.00	28.42	0.10	1.09	1.09	1.09
787.50	3.23	3.22	0.01	27.39	0.13	1.08	1.11	1.11
837.50	3.08	3.08	0.00	27.65	0.10	1.05	1.12	1.12
887.50	3.34	3.35	0.01	30.13	0.11	1.05	1.13	1.13
937.50	3.23	3.22	0.01	36.50	0.24	1.09	1.13	1.13
975.00	3.18	3.18	0.00	53.09	0.19	1.14	1.13	1.12
1000.00	3.27	3.28	0.01	36.11	0.19	1.18	1.13	1.12

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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