

# Power Splitter/Combiner

## ZAPD-1750+

2 Way-0° 50Ω 950 to 1750 MHz

### Maximum Ratings

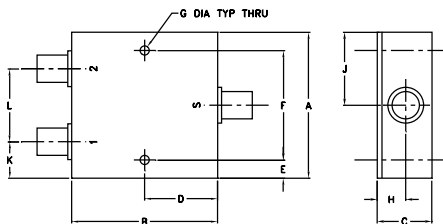
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.125W max.
DC Current	400 mA (200mA for each port)

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	H	J	K	L	wt
2.00	2.00	0.75	1.00	0.25	1.500	0.125	0.39	1.00	0.50	1.00	grams
50.80	50.80	19.05	25.40	6.35	38.10	3.18	9.91	25.40	12.70	25.40	170.0

### Features

- low insertion loss, 0.2 dB typ.
- high isolation, 30 dB typ.
- up to 10W power input as splitter
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 0.5 deg. typ.
- excellent VSWR, 1.1:1 typ.
- rugged shield case

### Applications

- cellular
- GPS
- satellite distribution
- communications systems

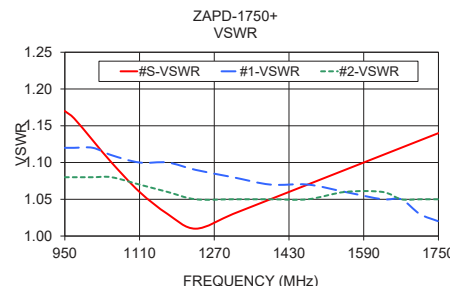
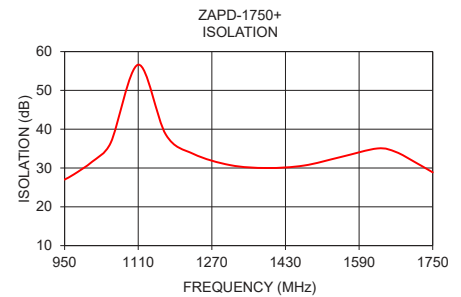
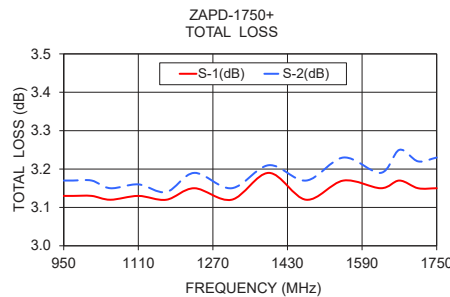
### Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)							
	Typ.	Min.	Typ.	Max.			S	OUT	Typ.	Max.	Typ.	Max.		
$f_L$ - $f_U$														
950-1750	30	22	0.2	0.4	4	0.5	1.15	1.5	1.22	1.5				

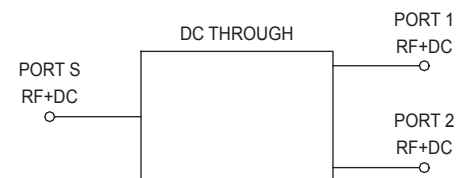
### Typical Performance Data

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						
950.00	3.13	3.17	0.04	27.03	0.17	1.17	1.12	1.08
970.00	3.13	3.17	0.05	28.35	0.22	1.16	1.12	1.08
1010.00	3.13	3.17	0.04	31.64	0.19	1.13	1.12	1.08
1050.00	3.12	3.15	0.03	36.45	0.13	1.10	1.11	1.08
1110.00	3.13	3.16	0.03	56.63	0.21	1.06	1.10	1.07
1170.00	3.12	3.14	0.02	38.61	0.06	1.03	1.10	1.06
1230.00	3.15	3.19	0.04	33.63	0.32	1.01	1.09	1.05
1310.00	3.12	3.15	0.03	30.74	0.08	1.03	1.08	1.05
1390.00	3.19	3.21	0.02	30.00	0.28	1.05	1.07	1.05
1470.00	3.12	3.17	0.05	30.63	0.14	1.07	1.07	1.05
1550.00	3.17	3.23	0.06	32.83	0.33	1.09	1.06	1.06
1630.00	3.15	3.19	0.05	35.04	0.27	1.11	1.05	1.06
1670.00	3.17	3.25	0.08	34.13	0.26	1.12	1.05	1.05
1710.00	3.15	3.22	0.07	31.61	0.16	1.13	1.03	1.05
1750.00	3.15	3.23	0.07	28.88	0.27	1.14	1.02	1.05

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.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



Generic photo used for illustration purposes only  
N-Type version shown  
CASE STYLE: F14

Connectors	Model
N-TYPE	ZAPD-1750-N+
SMA	ZAPD-1750-S+

### +RoHS Compliant

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