

Coaxial

# Power Splitter/Combiner

2 Way-90° 50Ω 1000 to 2000 MHz

## ZAPDQ-2



Generic photo used for illustration purposes only

SMA version shown

CASE STYLE: F14

Connectors	Model
N-TYPE	ZAPDQ-2-N
SMA	ZAPDQ-2-S

### 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	0.125W max.

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

### Pin Connections

SUM PORT	S
PORT 1 (0°)	1
PORT 2 (+90°)	3

### Features

- low insertion loss, 0.4 dB typ.
- good isolation, 22 dB typ.
- rugged shielded case

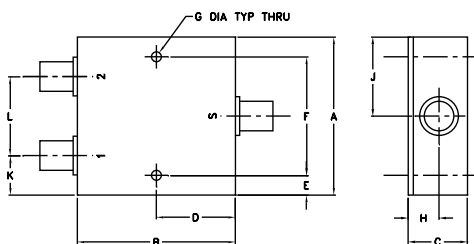
### Applications

- balanced amplifiers
- modulators
- test set-ups

### Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)	INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB	PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
$f_L$ - $f_U$	Typ. Min.	Typ. Max.	Max.	Max.
1000-2000	22 16	0.4 1.4	7.0	0.8

### Outline Drawing



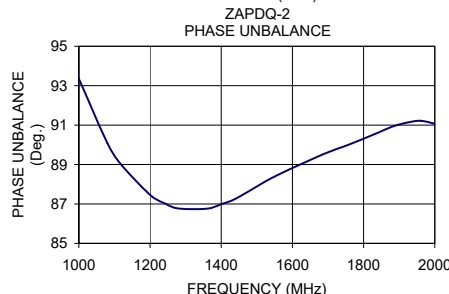
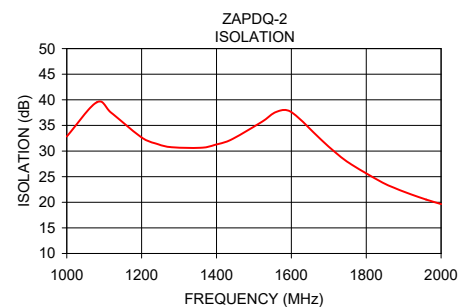
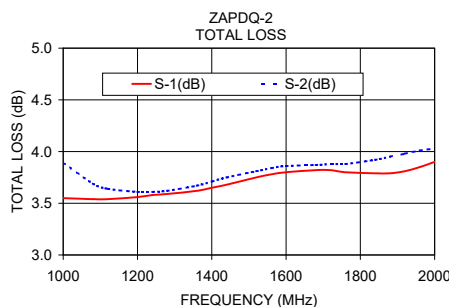
### Outline Dimensions (inch/mm)

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	

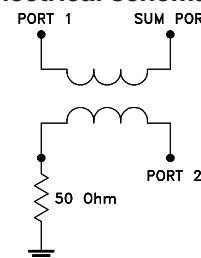
### Typical Performance Data

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						
1000.00	3.55	3.89	0.34	32.84	93.35	1.48	1.21	1.78
1080.00	3.54	3.69	0.15	39.51	90.09	1.32	1.20	1.50
1120.00	3.54	3.64	0.10	37.41	88.97	1.30	1.19	1.41
1200.00	3.56	3.61	0.05	32.65	87.46	1.27	1.18	1.33
1280.00	3.59	3.62	0.03	30.75	86.77	1.23	1.18	1.34
1360.00	3.62	3.67	0.05	30.65	86.76	1.27	1.19	1.41
1440.00	3.68	3.75	0.06	32.25	87.26	1.35	1.23	1.50
1520.00	3.75	3.81	0.06	35.64	88.10	1.34	1.28	1.56
1600.00	3.80	3.86	0.05	37.60	88.82	1.35	1.33	1.57
1680.00	3.82	3.87	0.05	32.19	89.47	1.34	1.36	1.52
1720.00	3.82	3.88	0.06	29.57	89.76	1.28	1.36	1.48
1840.00	3.79	3.92	0.14	23.99	90.61	1.11	1.29	1.39
1880.00	3.79	3.95	0.16	22.66	90.92	1.14	1.24	1.40
1920.00	3.81	3.98	0.16	21.53	91.12	1.22	1.19	1.42
2000.00	3.90	4.03	0.14	19.65	91.07	1.42	1.10	1.42

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



### electrical schematic



### 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-Circuit's applicable established test performance criteria and measurement instructions.  
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