

Coaxial

Power Splitter/Combiner

2 Way-90° 50Ω 2000 to 4200 MHz

ZAPDQ-4+



Generic photo used for illustration purposes only
CASE STYLE: F14

Connectors	Model
N-TYPE	ZAPDQ-4-N+
SMA	ZAPDQ-4-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	0.125W 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

- wideband, 2000 to 4200 MHz
- low insertion loss, 0.4 dB typ.
- good isolation, 22 dB typ.
- rugged shielded case

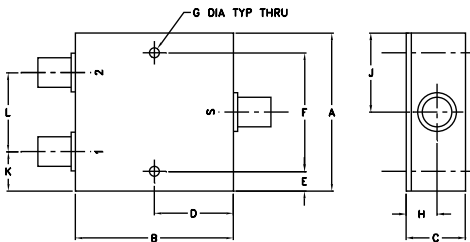
Applications

- balanced amplifiers
- modulators
- test set-ups

Electrical Specifications

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency		2000		4200	MHz
Insertion Loss (above theoretical 3 dB)	2000 - 4200	—	0.4	0.9	dB
Isolation	2000 - 4200	16	22	—	dB
Phase Unbalance	2000 - 4200	—	5	8	Degree
Amplitude Unbalance	2000 - 4200	—	—	1.0	dB
VSWR (Port S)	2000 - 4200	—	1.25	—	:1
VSWR (Port 1, 2)	2000 - 4200	—	1.35	—	:1

Outline Drawing



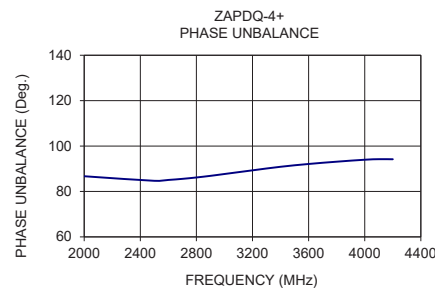
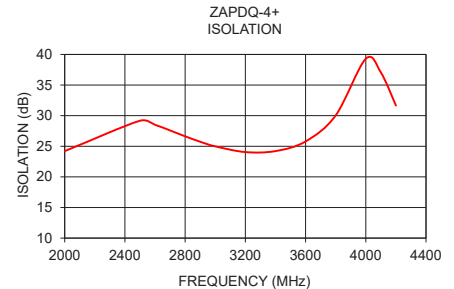
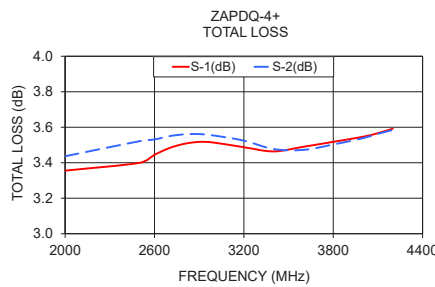
Outline Dimensions (inch/mm)

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

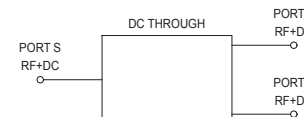
Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
2000	3.36	3.44	0.08	24.21	86.71	1.30	1.12	1.14
2500	3.40	3.52	0.12	29.17	84.70	1.19	1.12	1.41
2600	3.44	3.53	0.09	28.51	85.08	1.26	1.11	1.45
2700	3.48	3.55	0.07	27.59	85.56	1.31	1.10	1.46
2800	3.51	3.56	0.05	26.63	86.18	1.33	1.08	1.44
2900	3.52	3.56	0.04	25.74	86.89	1.33	1.07	1.41
3000	3.51	3.55	0.04	24.99	87.70	1.31	1.05	1.38
3200	3.49	3.52	0.04	24.05	89.31	1.22	1.03	1.28
3400	3.46	3.48	0.01	24.21	90.88	1.11	1.07	1.16
3600	3.49	3.47	0.02	25.79	92.11	1.02	1.14	1.09
3800	3.52	3.50	0.02	30.04	93.12	1.07	1.20	1.05
4000	3.55	3.54	0.01	39.30	93.99	1.09	1.24	1.08
4100	3.57	3.56	0.00	37.06	94.22	1.09	1.25	1.11
4200	3.59	3.58	0.01	31.66	94.19	1.07	1.28	1.15

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