

Coaxial Power Splitter/Combiner

ZAPDQ-4

2 Way-90° 50Ω 2000 to 4200 MHz

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



SMA version shown
CASE STYLE: F14

Connectors	Model
N-TYPE	ZAPDQ-4-N
SMA	ZAPDQ-4-S

Electrical Specifications

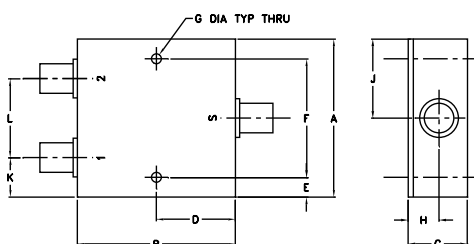
FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) Avg. of Coupled Outputs ABOVE 3 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
	Typ.	Min.	Typ.	Max.	Max.	Max.
f_L - f_U						
2000-4200	22	16	0.4	0.9	8.0	1.0

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						
2000.00	3.31	3.40	0.08	24.36	85.56	1.30	1.10	1.19
2550.00	3.34	3.34	0.00	30.45	83.54	1.07	1.13	1.20
3045.00	3.30	3.32	0.02	33.42	83.38	1.10	1.23	1.17
3100.00	3.32	3.35	0.03	33.35	83.33	1.11	1.23	1.17
3540.00	3.35	3.35	0.00	30.67	84.52	1.22	1.29	1.13
3650.00	3.43	3.50	0.07	29.59	85.06	1.24	1.27	1.12
3760.00	3.34	3.35	0.01	28.73	85.25	1.25	1.26	1.11
3815.00	3.43	3.45	0.02	28.42	84.98	1.26	1.25	1.11
3870.00	3.43	3.52	0.08	28.20	85.45	1.26	1.25	1.11
3925.00	3.36	3.44	0.07	27.94	85.82	1.27	1.24	1.11
3980.00	3.36	3.40	0.04	27.55	86.03	1.27	1.24	1.11
4035.00	3.43	3.44	0.01	27.32	85.79	1.27	1.23	1.11
4090.00	3.42	3.55	0.13	27.20	85.95	1.27	1.23	1.11
4145.00	3.36	3.47	0.11	26.98	86.84	1.27	1.22	1.12
4200.00	3.42	3.45	0.03	26.77	87.16	1.27	1.21	1.13

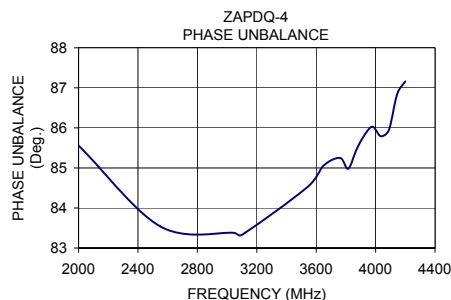
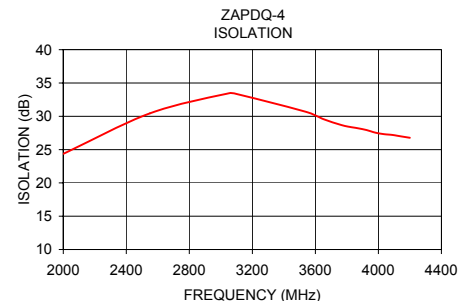
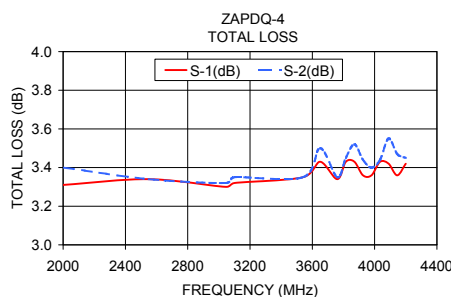
1. Total Loss = Insertion Loss + 3dB splitter loss.

Outline Drawing

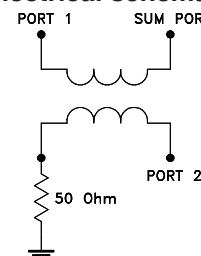


Outline Dimensions (inch/mm)

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



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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