

Power Splitter/Combiner

ZN4PD1-50+

4 Way-0° 50Ω 500 to 5000 MHz

Maximum Ratings

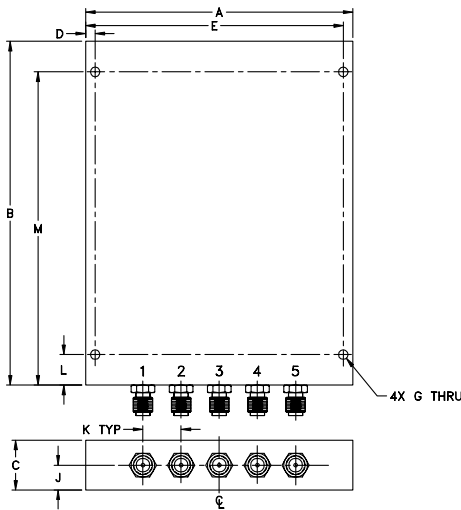
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.75W max.
DC Current	1.0 A (250mA for each port)

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

Coaxial Connections

SUM PORT	3
PORT 1	1
PORT 2	2
PORT 3	4
PORT 4	5

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
3.50	4.50	.65	.125	3.375	--	.125
88.90	114.30	16.51	3.18	85.73	--	3.18
H	J	K	L	M	wt	
--	.33	.50	.400	4.100	grams	
--	8.38	12.70	10.16	104.14	288	

Features

- wideband, 500 to 5000 MHz
- high isolation, 23 dB typ.
- good input matching VSWR, 1.3:1 typ.
- up to 10W power input as splitter

Applications

- UHF TV
- cellular/ISM/GSM
- satellite distribution
- GPS/L-BAND (MARSAT)
- PCS/DCS/UMTS
- ISM
- MMDS
- SATCOM



CASE STYLE: UU846
Connectors Model
SMA ZN4PD1-50-S+

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

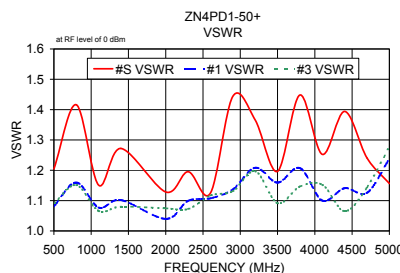
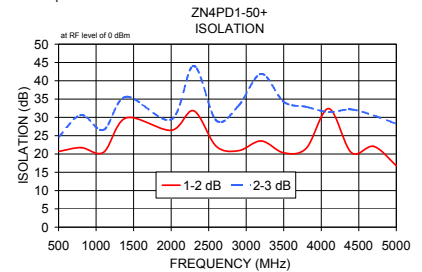
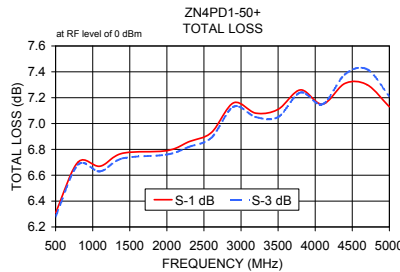
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)	
	Typ.	Min.	Typ.	Max.	Max.	Max.	S Typ.	OUT Typ.
f_L - f_U								
500-5000	23	13	0.9	1.8	8	0.6	1.3	1.1
500-1600	23	15	0.7	1.4	4	0.6	1.3	1.1
1600-2700	23	17	0.8	1.4	7	0.6	1.3	1.1
2700-3600	22	16	1.1	1.7	7	0.6	1.3	1.1
3700-4800	22	14	1.2	1.7	8	0.6	1.3	1.1

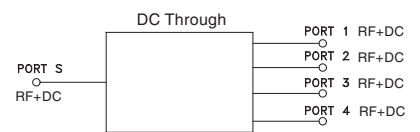
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)				Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3	VSWR 4
	S-1	S-2	S-3	S-4		1-2	2-3	3-4						
500.00	6.31	6.31	6.28	6.34	0.06	20.69	24.63	21.07	0.34	1.20	1.08	1.09	1.09	1.10
800.00	6.70	6.68	6.68	6.74	0.06	21.74	30.62	22.16	0.40	1.42	1.16	1.15	1.15	1.16
1100.00	6.67	6.66	6.63	6.69	0.06	20.47	26.59	20.84	0.40	1.15	1.08	1.06	1.07	1.08
1400.00	6.77	6.75	6.73	6.80	0.06	29.86	35.63	29.99	0.28	1.27	1.10	1.09	1.08	1.08
2000.00	6.79	6.79	6.76	6.80	0.04	26.48	29.42	27.14	0.65	1.13	1.04	1.07	1.07	1.05
2300.00	6.86	6.85	6.82	6.88	0.06	31.80	44.04	32.61	0.53	1.20	1.10	1.07	1.07	1.11
2600.00	6.93	6.94	6.89	6.93	0.06	22.10	29.18	22.57	0.54	1.12	1.11	1.13	1.12	1.09
2900.00	7.16	7.15	7.13	7.19	0.05	20.91	33.21	20.86	0.81	1.44	1.14	1.14	1.13	1.15
3200.00	7.08	7.06	7.05	7.12	0.07	23.57	41.88	24.26	0.73	1.37	1.21	1.16	1.20	1.24
3500.00	7.11	7.12	7.05	7.07	0.07	20.33	34.26	20.54	1.16	1.20	1.16	1.15	1.09	1.08
3800.00	7.26	7.29	7.24	7.26	0.05	21.55	32.88	21.45	1.23	1.45	1.21	1.21	1.15	1.17
4100.00	7.15	7.18	7.15	7.17	0.03	32.40	31.46	30.72	1.40	1.25	1.10	1.10	1.15	1.16
4400.00	7.31	7.38	7.38	7.36	0.08	20.40	32.16	19.95	1.20	1.39	1.14	1.16	1.07	1.09
4700.00	7.30	7.37	7.42	7.40	0.12	22.06	30.51	22.00	1.08	1.24	1.13	1.19	1.14	1.16
5000.00	7.13	7.26	7.21	7.09	0.17	16.83	28.25	17.40	1.41	1.16	1.24	1.36	1.28	1.24

1. Total Loss = Insertion Loss + 6dB 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.
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