

Power Splitter/Combiner

ZN4PD1-842-S+

4 Way-0° 50Ω 2100 to 8400 MHz

Maximum Ratings

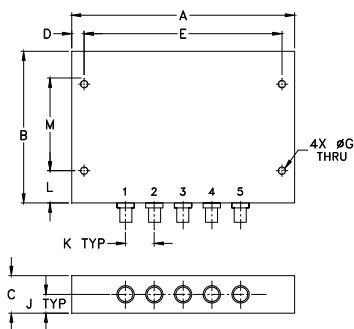
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.8 max.
DC Current	1.0 A (250mA for each port)

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

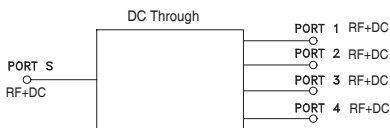
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
3.88	2.63	.65	.22	3.438	--	.196
98.55	66.80	16.51	5.59	87.33	--	4.98
H	J	K	L	M	wt	
--	.33	.50	.56	1.500	grams	
--	8.38	12.70	14.22	38.10	170	

Electrical Schematic



Features

- wide frequency band, 2100 to 8400 MHz
- low insertion loss, 1.0 dB typ.
- low amplitude unbalance 0.3 dB typ.
- low phase unbalance 4 deg. typ.

Applications

- high band PCS
- CATV
- defense communication
- WiFi
- Bluetooth



Generic photo used for illustration purposes only

CASE STYLE: UU846-2

Connectors	Model
SMA	ZN4PD1-842-S+

+RoHS Compliant

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

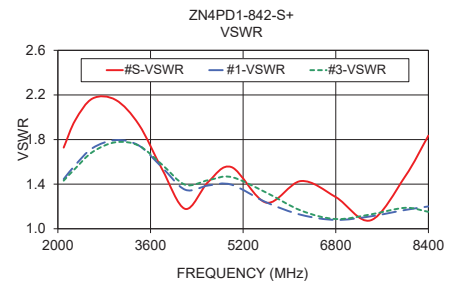
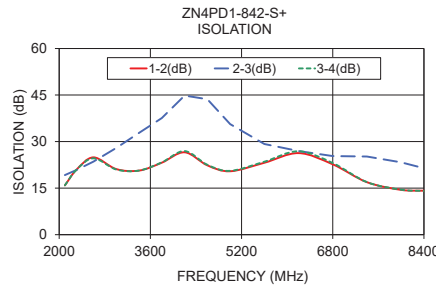
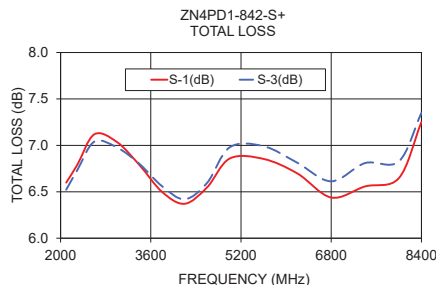
Electrical Specifications

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		2100		8400	MHz
Insertion Loss Above 6.0 dB	2400-6800	—	0.8	1.3	dB
	2100-8400	—	1.3	1.9	
Isolation	2400-6800	18	24	—	dB
	2100-8400	12	19	—	
Phase Unbalance	2400-6800	—	4	8	Degree
	2100-8400	—	5	9	
Amplitude Unbalance	2400-6800	—	0.3	0.8	dB
	2100-8400	—	0.5	1.0	
VSWR Input	2400-6800	—	1.6	—	:1
	2100-8400	—	1.6	—	
VSWR Output	2400-6800	—	1.4	—	:1
	2100-8400	—	1.4	—	

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						
2100	6.60	6.59	6.52	6.59	0.08	15.87	19.20	15.90	0.49	1.73	1.45	1.48	1.43	1.44
2300	6.79	6.76	6.74	6.81	0.07	20.86	20.81	20.84	0.59	1.97	1.57	1.60	1.54	1.54
2600	7.12	7.06	7.04	7.11	0.08	24.91	23.52	24.60	0.61	2.17	1.72	1.76	1.69	1.69
3000	7.04	7.02	6.98	7.02	0.06	21.14	27.91	21.00	0.44	2.15	1.80	1.83	1.78	1.76
3400	6.79	6.81	6.80	6.82	0.03	20.64	32.78	20.64	0.53	1.93	1.75	1.72	1.74	1.73
3800	6.50	6.49	6.56	6.54	0.07	23.19	37.56	23.29	0.74	1.53	1.55	1.51	1.57	1.53
4200	6.37	6.36	6.42	6.39	0.06	26.54	44.81	26.93	0.76	1.18	1.35	1.32	1.39	1.36
4600	6.55	6.59	6.60	6.56	0.05	22.33	43.66	22.51	0.61	1.42	1.39	1.36	1.44	1.39
5000	6.86	6.95	6.98	6.91	0.12	20.43	35.61	20.56	0.70	1.55	1.40	1.40	1.46	1.44
5600	6.85	6.90	6.99	6.93	0.14	23.17	29.21	23.50	1.39	1.23	1.24	1.31	1.32	1.30
6200	6.70	6.76	6.81	6.74	0.11	26.28	26.94	26.87	1.37	1.43	1.13	1.17	1.16	1.15
6800	6.44	6.57	6.61	6.49	0.17	22.66	25.34	23.08	1.33	1.28	1.08	1.07	1.09	1.10
7400	6.56	6.58	6.81	6.67	0.25	16.91	25.18	16.93	1.20	1.08	1.11	1.09	1.13	1.15
8000	6.65	6.88	6.83	6.74	0.24	14.43	23.31	14.49	2.13	1.47	1.17	1.16	1.19	1.23
8400	7.25	7.41	7.35	7.26	0.16	14.16	21.42	14.09	3.03	1.83	1.20	1.12	1.15	1.16

1. Total Loss = Insertion Loss + 6dB splitter loss.



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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