

# Power Splitter/Combiner

## ZN4PD1-842-S+

4 Way-0° 50Ω 2100 to 8400 MHz

### Maximum Ratings

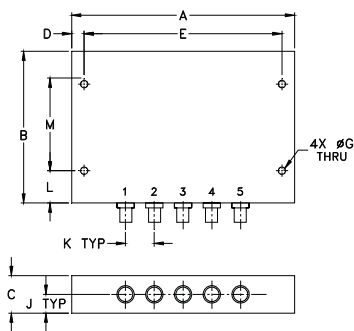
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.8 max.
DC Current	1.0 A (250mA for each port)

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

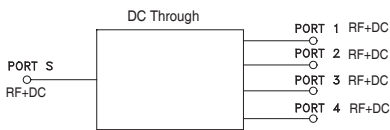
### Outline Drawing



### 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

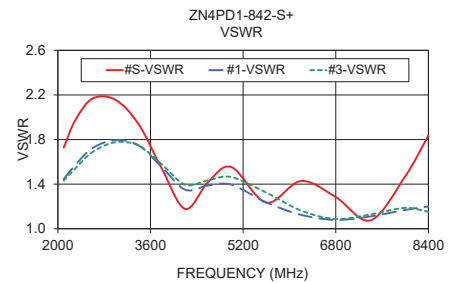
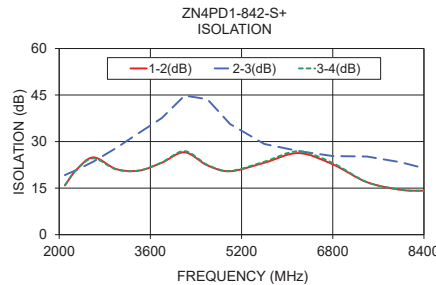
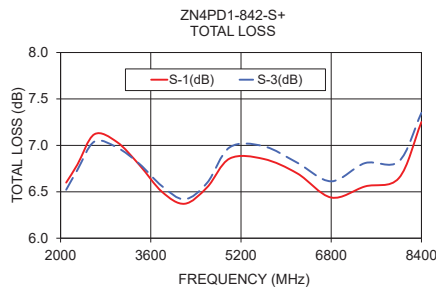
### Electrical Specifications

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

### Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (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.
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