

DC Pass

Power Splitter/Combiner

ZN4PD-642W-S+

4 Way-0° 50Ω 1600 to 6400 MHz

Maximum Ratings

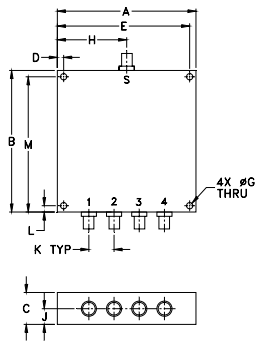
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	1.2W max.
DC Current (each port)	1A max.

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

Coaxial Connections

SUMPORT	S
PORT 1	1
PORT 2	2
PORT 3	3
PORT 4	4

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
2.75	2.80	.63	.125	2.625	—	.125
69.85	71.12	16.00	3.18	66.68	—	3.18
H	J	K	L	M	wt	
1.38	.31	.500	.125	2.675	grams	
35.05	7.87	12.70	3.18	67.95	140	

Electrical Schematic



Features

- wideband, 1600 to 6400 MHz
- low insertion loss, 1.0 dB typ.
- low amplitude unbalance, 0.1 dB typ.
- low phase unbalance, 2deg. typ.
- excellent output VSWR, 1.15:1 typ.
- DC Pass from sum port to all output ports

Applications

- high band PCS
- UNII
- WIMAX
- WiFi
- bluetooth



Generic photo used for illustration purposes only

CASE STYLE: UU182

Connectors	Model
SMA	ZN4PD-642W-S+

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

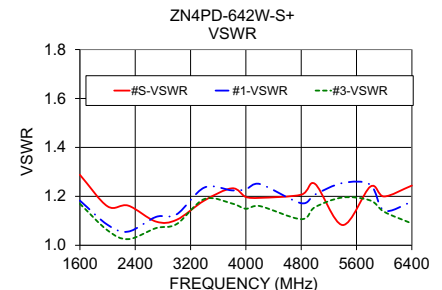
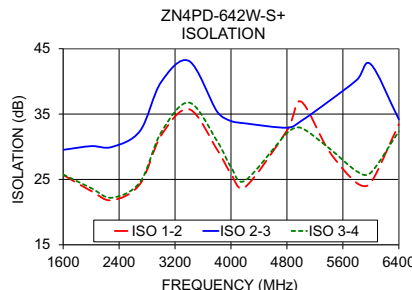
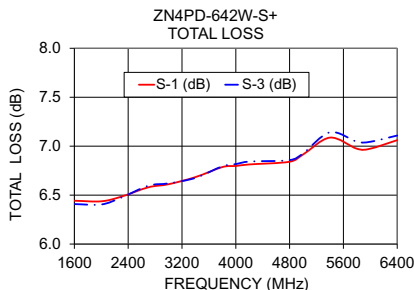
Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		1600		6400	MHz
Insertion Loss (above theoretical 6.0 dB)	1600 - 4200 4200 - 6400	—	0.7 1.0	1.2 1.6	dB
Isolation	1600 - 4200 4200 - 6400	17 18	23 25	—	dB
Phase Unbalance	1600 - 4200 4200 - 6400	—	2 4	5 8	Degree
Amplitude Unbalance	1600 - 4200 4200 - 6400	—	0.1 0.2	0.4 0.7	dB
VSWR (Port S)	1600 - 4200 4200 - 6400	—	1.25 1.2	—	:1
VSWR (Port 1-4)	1600 - 4200 4200 - 6400	—	1.2 1.15	—	:1

Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)				Amp. Unb. (dB)	Isolation (dB)			Phase Unb. (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						
1600	6.44	6.41	6.42	6.43	0.03	25.70	29.53	25.76	0.98	1.29	1.18	1.16	1.17	1.16
2000	6.44	6.40	6.42	6.43	0.03	23.23	30.09	23.68	1.19	1.16	1.08	1.06	1.06	1.06
2300	6.48	6.48	6.46	6.47	0.03	21.81	29.98	22.21	1.42	1.16	1.06	1.02	1.03	1.02
2700	6.58	6.60	6.57	6.56	0.03	24.31	32.44	24.60	1.45	1.10	1.12	1.06	1.07	1.07
3000	6.61	6.62	6.60	6.58	0.04	31.71	39.88	32.19	1.67	1.10	1.13	1.07	1.09	1.09
3400	6.68	6.68	6.66	6.64	0.04	35.74	43.12	36.76	1.99	1.18	1.24	1.17	1.19	1.18
3800	6.79	6.79	6.77	6.72	0.07	29.58	35.39	30.88	2.21	1.23	1.22	1.16	1.17	1.15
4000	6.80	6.82	6.78	6.74	0.08	25.87	33.94	26.91	2.25	1.20	1.23	1.15	1.15	1.14
4200	6.81	6.84	6.79	6.75	0.10	23.81	33.58	24.81	2.30	1.19	1.25	1.16	1.16	1.15
4800	6.84	6.86	6.86	6.81	0.05	32.49	32.91	32.09	2.57	1.21	1.17	1.07	1.11	1.10
5000	6.91	6.93	6.94	6.89	0.05	36.92	33.92	32.89	2.63	1.25	1.21	1.11	1.16	1.14
5400	7.09	7.14	7.12	7.07	0.07	29.36	36.97	29.80	3.02	1.08	1.25	1.17	1.20	1.18
5800	6.97	7.05	7.01	6.92	0.13	24.44	40.24	26.23	3.46	1.24	1.25	1.18	1.18	1.19
6000	6.97	7.04	7.02	6.95	0.10	24.50	42.61	26.05	3.78	1.20	1.14	1.14	1.14	1.15
6400	7.06	7.11	7.09	7.05	0.06	33.44	34.19	32.35	4.55	1.24	1.18	1.06	1.09	1.08

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.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/WCLStore/terms.jsp

