

# Power Splitter/Combiner

**ZN4PD-272-S+**

4 Way-0° 50Ω 500 to 2700 MHz

## Maximum Ratings

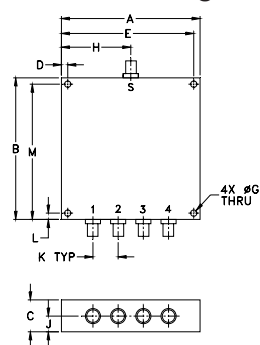
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	2.0W max.
DC Current	1.0 A (250mA for each port)

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

## Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2
PORT 3	3
PORT 4	4

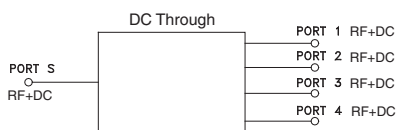
## Outline Drawing



## 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, 500 to 2700 MHz
- rugged, shielded case
- power input up to 10W
- excellent amplitude unbalance, 0.2 dB typ.
- high isolation, 19 dB typ.
- low insertion loss, 0.9 dB typ.

## Applications

- UHF
- cellular, GPS, PCS
- receivers/transmitters
- instrumentation
- CATV



Generic photo used for illustration purposes only

CASE STYLE: UU182

Connectors	Model
SMA	ZN4PD-272-S+

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

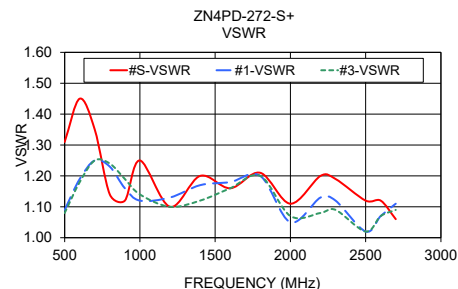
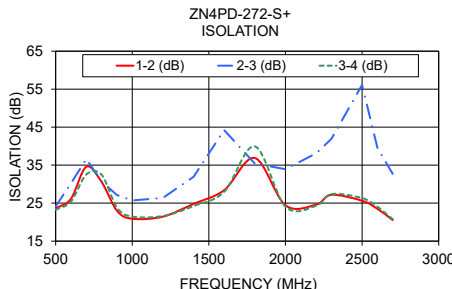
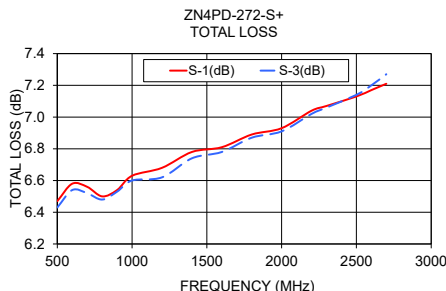
## Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
<b>Frequency Range</b>		500	—	2700	MHz
<b>Insertion Loss (above theoretical 6.0 dB)</b>	500-1500	—	0.9	1.3	dB
	1500-2700	—	1.2	1.6	dB
<b>Isolation</b>	500-1500	15	25	—	dB
	1500-2700	15	22	—	dB
<b>Phase Unbalance</b>	500-1500	—	1.7	3	Degree
	1500-2700	—	3.1	6	Degree
<b>Amplitude Unbalance</b>	500-1500	—	0.2	0.8	dB
	1500-2700	—	0.4	0.8	dB
<b>VSWR (Port S)</b>	500-1500	—	1.2	1.65	dB
	1500-2700	—	1.4	1.7	dB
<b>VSWR Output (Port 1-4)</b>	500-1500	—	1.2	1.6	dB
	1500-2700	—	1.2	1.5	dB

## Typical Performance Data

Freq. (MHz)	Total Loss <sup>1</sup> (dB)				Amp. Unbal. (dB)	Isolation (dB)			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	6.47	6.39	6.43	6.43	0.08	23.59	24.14	23.26	1.31	1.09	1.06	1.08	1.08
600.00	6.58	6.50	6.54	6.54	0.08	26.15	30.21	25.40	1.45	1.19	1.16	1.18	1.19
700.00	6.56	6.48	6.52	6.52	0.08	34.58	36.61	32.52	1.35	1.25	1.23	1.25	1.25
800.00	6.50	6.43	6.48	6.47	0.07	30.54	30.71	32.46	1.14	1.23	1.21	1.24	1.24
900.00	6.54	6.48	6.53	6.51	0.06	23.01	27.13	23.83	1.12	1.16	1.16	1.19	1.18
1000.00	6.63	6.57	6.60	6.58	0.06	20.89	25.69	21.46	1.25	1.12	1.12	1.14	1.13
1200.00	6.68	6.62	6.62	6.59	0.09	21.44	26.38	21.61	1.10	1.13	1.12	1.10	1.11
1400.00	6.78	6.73	6.74	6.70	0.08	24.79	31.90	24.22	1.20	1.17	1.15	1.12	1.15
1600.00	6.81	6.75	6.78	6.73	0.08	28.41	44.23	27.98	1.16	1.18	1.17	1.16	1.17
1800.00	6.89	6.84	6.87	6.82	0.07	36.87	35.40	39.93	1.21	1.20	1.20	1.20	1.20
2000.00	6.93	6.89	6.91	6.86	0.08	24.42	33.93	24.06	1.11	1.05	1.07	1.07	1.07
2200.00	7.04	7.01	7.02	6.95	0.10	24.61	38.10	24.29	1.20	1.13	1.09	1.08	1.08
2300.00	7.07	7.04	7.06	6.97	0.10	27.19	41.93	27.38	1.19	1.12	1.10	1.09	1.10
2500.00	7.13	7.11	7.14	7.02	0.12	25.63	56.12	26.33	1.12	1.02	1.03	1.02	1.06
2600.00	7.17	7.16	7.20	7.06	0.14	23.50	39.56	24.05	1.12	1.07	1.03	1.07	1.06
2700.00	7.21	7.21	7.27	7.10	0.17	20.53	32.69	20.76	1.06	1.11	1.05	1.09	1.07
2700.00	7.21	7.21	7.27	7.10	0.17	20.53	32.69	20.76	1.06	1.11	1.05	1.09	1.07

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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