

DC Pass

# Power Splitter/Combiner

ZN2PD2-50-S+

2 Way-0° 50Ω 500 to 5000 MHz



Generic photo used for illustration purposes only

CASE STYLE: VVV845

Connectors Model  
SMA ZN2PD2-50-S+

**+RoHS Compliant**

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

## 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	0.25W max.
DC Current	600 mA (300mA for each port)

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

## Coaxial Connections

SUPPORT	S
PORT 1	1
PORT 2	2

## Features

- wideband, 500 to 5000 MHz
- excellent amplitude unbalance, 0.05 dB typ.
- excellent phase unbalance, 0.5 deg. typ.
- up to 10W power input as splitter

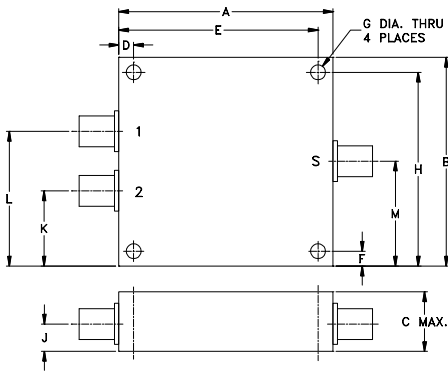
## Applications

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

## Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 3.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)			
	Typ.	Min.	Typ.	Max.			S		OUT	
$f_L$ - $f_U$					Max.	Max.	Typ.	Max.	Typ.	Max.
500-5000	25	15	0.8	1.4	4	0.5	1.2	—	1.1	—
600-1600	24	17	0.7	1.1	2	0.3	1.2	—	1.1	—
1600-2700	26	18	0.8	1.2	3	0.3	1.2	—	1.1	—
2700-3600	28	19	0.9	1.3	3	0.4	1.2	—	1.1	—
3600-4800	22	18	0.9	1.4	4	0.5	1.2	—	1.1	—

## Outline Drawing



## Outline Dimensions (incl mm)

A	B	C	D	E	F	G
4.50	2.50	.67	.400	4.100	.125	.125
114.30	63.50	17.02	10.16	104.14	3.18	3.18

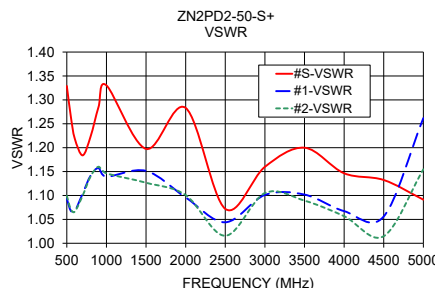
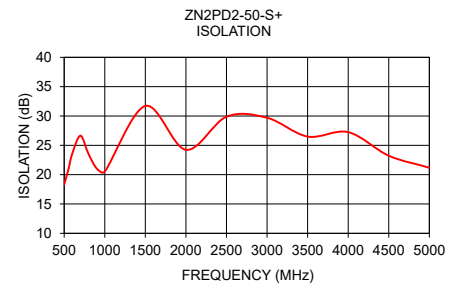
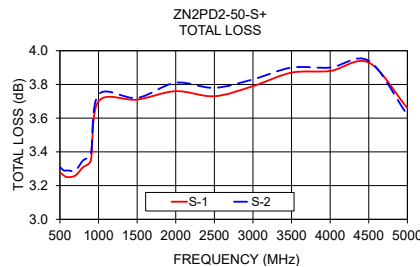
  

H	J	K	L	M	wt
2.375	.33	.75	1.75	1.25	grams
60.33	8.38	19.05	44.45	31.75	247

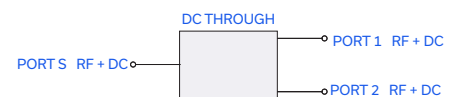
## Typical Performance Data

Frequency (MHz)	Total Loss <sup>1</sup> (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
500.00	3.28	3.31	0.04	18.32	0.02	1.33	1.09	1.10
550.00	3.26	3.29	0.03	20.81	0.02	1.27	1.07	1.07
600.00	3.25	3.29	0.04	23.61	0.09	1.22	1.07	1.07
700.00	3.26	3.29	0.03	26.64	0.12	1.18	1.10	1.10
800.00	3.31	3.35	0.04	23.51	0.07	1.22	1.14	1.14
900.00	3.35	3.39	0.04	21.06	0.04	1.29	1.16	1.16
1000.00	3.70	3.74	0.03	20.52	0.12	1.33	1.14	1.15
1500.00	3.71	3.72	0.01	31.72	0.23	1.20	1.15	1.13
2000.00	3.76	3.81	0.05	24.24	0.19	1.28	1.10	1.10
2500.00	3.73	3.78	0.06	29.88	0.36	1.07	1.04	1.02
3000.00	3.79	3.83	0.04	29.70	0.48	1.16	1.10	1.11
3500.00	3.87	3.90	0.02	26.49	0.58	1.20	1.10	1.09
4000.00	3.88	3.90	0.03	27.25	0.54	1.15	1.07	1.06
4500.00	3.93	3.94	0.01	23.23	0.81	1.13	1.06	1.01
5000.00	3.66	3.62	0.04	21.19	1.03	1.09	1.26	1.15

1. Total Loss = Insertion Loss + 3dB splitter loss.



## electrical schematic



## Notes

- A. 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.  
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.  
 C. The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

