

Power Splitter/Combiner

4 Way-0° 50Ω 1700 to 4200 MHz

ZB4PD-42+



Generic photo used for illustration purposes only

CASE STYLE: Z54

Connectors	Model
SMA	ZB4PD-42-S+
N-TYPE	ZB4PD-42-N+

+RoHS Compliant

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

Maximum Ratings

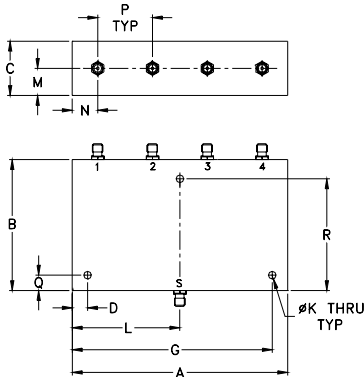
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.375W max.
DC Current	1.0 A (250mA for each port)

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	G	K	
3.50	2.13	.88	.250	3.250	.125	
88.90	54.10	22.35	6.35	82.55	3.18	
L	M	N	P	Q	R	wt
1.750	.44	.415	.89	.250	1.813	grams
44.45	11.18	10.54	22.61	6.35	46.05	250

Features

- wideband, 1700 to 4200 MHz
- up to 10W power input as splitters
- rugged, shielded case

Applications

- MMDS
- ISM
- receivers/transmitters

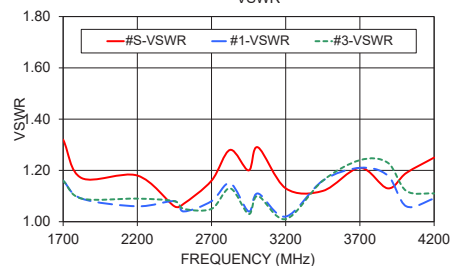
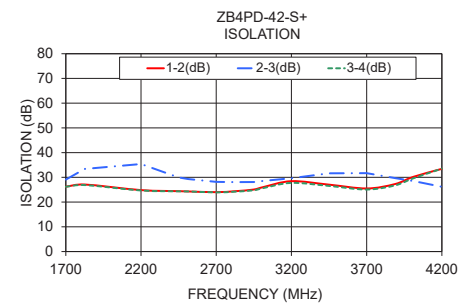
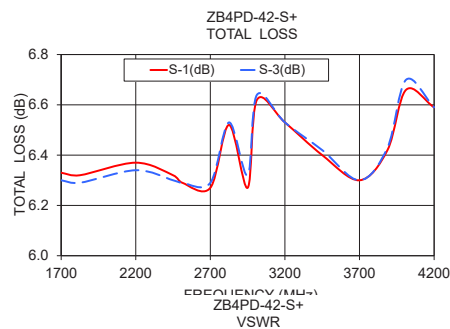
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 6.0 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)
$f_L - f_U$	Typ.	Min.	Typ.	Max.	Max.	Max.
1700-4200	23	16	0.5	1.4	8	0.8

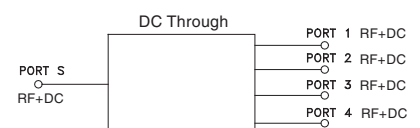
Typical Performance Data

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						
1700.00	6.33	6.32	6.30	6.31	0.03	26.23	29.11	26.20	1.52	1.32	1.16	1.15	1.16	1.17
1825.00	6.32	6.30	6.29	6.30	0.03	27.10	33.40	26.88	1.59	1.17	1.09	1.08	1.09	1.10
2200.00	6.37	6.37	6.34	6.34	0.03	24.84	35.39	24.69	1.83	1.18	1.06	1.08	1.09	1.07
2450.00	6.32	6.34	6.30	6.29	0.05	24.41	29.95	24.35	2.05	1.06	1.08	1.07	1.08	1.07
2512.50	6.29	6.31	6.29	6.26	0.06	24.30	29.31	24.29	2.09	1.07	1.04	1.03	1.05	1.04
2700.00	6.27	6.30	6.29	6.27	0.03	24.00	28.16	23.93	2.16	1.16	1.08	1.07	1.05	1.06
2825.00	6.52	6.58	6.53	6.50	0.08	24.39	28.08	24.21	2.18	1.28	1.15	1.12	1.13	1.14
2950.00	6.27	6.34	6.32	6.25	0.09	25.07	28.09	24.77	2.20	1.20	1.04	1.04	1.03	1.04
3012.50	6.62	6.69	6.64	6.58	0.11	26.05	28.54	25.65	2.40	1.29	1.11	1.08	1.10	1.12
3200.00	6.53	6.63	6.53	6.47	0.16	28.45	29.64	27.75	2.55	1.13	1.02	1.05	1.01	1.03
3450.00	6.40	6.49	6.42	6.33	0.16	27.04	31.63	26.53	2.66	1.12	1.16	1.22	1.16	1.13
3700.00	6.30	6.38	6.30	6.23	0.16	25.50	31.70	25.08	2.61	1.21	1.21	1.26	1.24	1.21
3887.50	6.42	6.50	6.43	6.34	0.16	27.26	29.70	26.73	2.65	1.13	1.18	1.20	1.23	1.21
4012.50	6.66	6.79	6.70	6.59	0.20	30.24	28.50	29.66	3.11	1.19	1.06	1.09	1.12	1.10
4200.00	6.59	6.73	6.59	6.49	0.24	33.43	26.18	33.52	3.46	1.25	1.09	1.07	1.11	1.10

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



electrical schematic



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-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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[ZB4PD-42-S+](#)