

2 Way-0° Power Splitter

ZB2PD-63+

50Ω 600 to 6000 MHz

The Big Deal

- High Power handling (15W)
- Low Unbalance, 0.1 dB & 5 deg. typ.
- Low Insertion Loss (0.8 dB typ.)
- Low Passive InterModulation Distortion
- Wide Bandwidth



CASE STYLE: JJJ1457

Product Overview

Mini-Circuits new N-Connectorized 0° Power Splitter, model ZB2PD-63+, offers an industry leading low Insertion Loss and wide bandwidth. The outstanding phase and amplitude unbalance make this component a versatile building block for use in a variety of systems and sub-system designs. The design includes Tri-Metal based connectors for low Passive InterModulation Distortion, making the ZB2PD-63+ ideal for test setups and high dynamic range applications.

Key Features

Feature	Advantages
Wide Bandwidth	Operating from 600 to 6000 MHz, the ZB2PD-63+ is ideal for wideband distribution systems such as In Building wireless designs, Test Setups, and ELINT.
High Power Handling	Capable of operating up to 15W Input Power, the ZB2PD-63+ can be used for high power signal distribution.
Low Insertion Loss	Use of premium RF substrates and optimized design for low loss over entire bandwidth.
Low Passive Modulation distortion	By using Tri-metal N type connectors Passive InterModulation is reduced. The ZB2PD-63+ is suitable for systems with high dynamic range requirements.



ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IFIRF MICROWAVE COMPONENTS

For detailed performance specs
& shopping online see web site

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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/MCLStore/terms.jsp.

Coaxial

Power Splitter/Combiner

2 Way-0° 50Ω 600 to 6000 MHz

Maximum Ratings

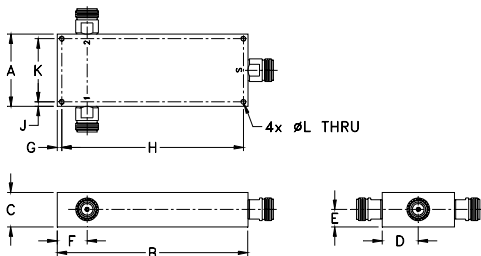
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	15W max.
Internal Dissipation	0.5W max.

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

Coaxial Connections

SUM PORT	S
PORT 1	1
PORT 2	2

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
1.99	5.26	.95	1.00	.51	.83
50.55	133.60	24.13	25.40	12.95	21.08
G	H	J	K	L	wt
.13	5.010	.13	1.740	.125	grams
3.30	127.25	3.30	44.20	3.18	350.0

Features

- low insertion loss, 0.5 dB typ.
- wideband, 350 to 6000 MHz
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 2 deg. typ.
- up to 15W power input as splitter

Applications

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

ZB2PD-63+



CASE STYLE: JJJ1457

Connectors	Model	Price	Qty.
N-Type	ZB2PD-63+	\$129.95ea.	(1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify 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		600		6000	MHz
Insertion Loss (above theoretical 3.0 dB)	600-1600	—	0.3	0.5	dB
	1600-2700	—	0.4	0.6	
	2700-3600	—	0.5	0.8	
	3600-6000	—	0.9	1.2	
Isolation	600-1600	16	19	—	dB
	1600-2700	16	19	—	
	2700-3600	17	21	—	
	3600-6000	12	15	—	
Phase Unbalance	600-1600	—	1.5	4	Degree
	1600-2700	—	2.4	5	
	2700-3600	—	2.6	7	
	3600-6000	—	4.6	9	
Amplitude Unbalance	600-1600	—	0.1	0.2	dB
	1600-2700	—	0.1	0.2	
	2700-3600	—	0.1	0.3	
	3600-6000	—	0.2	0.4	
VSWR (Port S)	600-1600	—	1.33	1.5	:1
	1600-2700	—	1.38	1.5	
	2700-3600	—	1.48	1.65	
	3600-6000	—	1.72	2.0	
VSWR (Port 1-2)	600-1600	—	1.23	1.4	:1
	1600-2700	—	1.26	1.5	
	2700-3600	—	1.48	1.8	
	3600-6000	—	1.53	1.8	

Electrical Schematic



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ZN2PD-63+
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AD/CP/AM
111006

Typical Performance Data

Frequency (MHz)	Total Loss ¹ (dB)		Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
	S-1	S-2						
600.00	3.11	3.12	0.01	26.85	0.12	1.13	1.07	1.12
700.00	3.13	3.13	0.01	21.82	0.14	1.07	1.09	1.07
1200.00	3.17	3.18	0.01	23.85	0.26	1.12	1.07	1.11
1600.00	3.23	3.24	0.01	26.05	0.37	1.14	1.21	1.13
1800.00	3.22	3.23	0.01	29.26	0.43	1.09	1.12	1.08
2700.00	3.32	3.30	0.02	22.99	0.77	1.15	1.19	1.17
3000.00	3.35	3.32	0.03	36.64	0.74	1.21	1.23	1.26
3600.00	3.36	3.35	0.02	26.45	0.71	1.15	1.09	1.16
3700.00	3.37	3.36	0.01	25.29	0.70	1.12	1.03	1.13
3800.00	3.36	3.37	0.00	25.45	0.72	1.11	1.02	1.12
5000.00	3.69	3.66	0.02	32.45	1.33	1.35	1.37	1.35
5800.00	3.74	3.63	0.10	19.25	1.82	1.35	1.43	1.34
6000.00	3.68	3.53	0.15	16.13	1.64	1.45	1.33	1.45

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

