

3 Way-0° 50Ω 150 to 6000 MHz



CASE STYLE:UU1332

The Big Deal

- Wideband performance
- Low amplitude and phase unbalance
- Good insertion loss

Product Overview

The three-way, in-phase splitter and combiner covers a wide frequency range (150-6000 MHz), making this splitter suitable for GPS, GSM, DCS and PCS applications, in addition to WiFi, Bluetooth and 802.11a uses. This model also features low insertion loss, amplitude and phase unbalance. It is packaged in a enclosure with built-in SMA or N connectors for ease of use.

Key Features

Feature	Advantages
Operating over a very wide bandwidth from 150 MHz to 6000 MHz	The very wide bandwidth performance of the ZB3PD-63+ enables this splitter/combiner to be used in a wide range of applications including broadband systems such as test, measurement and defense/aerospace. This model covers a variety of narrow band applications including GSM, GPS, DCS and PCS applications, in addition to WiFi, Bluetooth, 802.11a, U-NII and ISM applications.
Good insertion loss	With typical insertion loss of only 1.0 dB above the splitter loss up to 4 GHz, this splitter supports medium power signal distribution applications where loss is critical.
Good amplitude and phase performance	Typical amplitude unbalance of .5 dB and phase unbalance of 5° make this splitter ideal for parallel path/multichannel systems.

Power Splitter/Combiner

3 Way-0° 50Ω 150 to 6000 MHz

ZB3PD-63+



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Connectors	Model	Price	Qty.
SMA	ZB3PD-63-S+	\$149.95 ea.	(1-9)
N-Type	ZB3PD-63-N+	\$154.95 ea.	(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.

Maximum Ratings

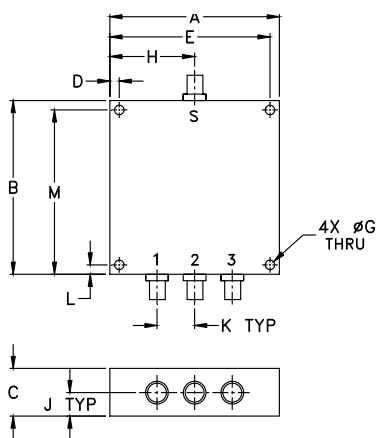
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	5W max.
Internal Dissipation	0.33W max.

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

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
4.50	6.00	.88	.15	4.350	-	.156
114.30	152.40	22.35	3.81	110.49	-	3.96
H	J	K	L	M		wt
2.25	.44	1.50	0.15	5.85		grams
57.15	11.18	38.10	3.81	148.59		760

Features

- wideband, 150 to 6000 MHz
- low insertion loss, 1 dB typ.
- good isolation, 20 dB typ.
- good amplitude unbalance, 0.5 dB typ.

Applications

- cellular
- PCN
- instrumentation

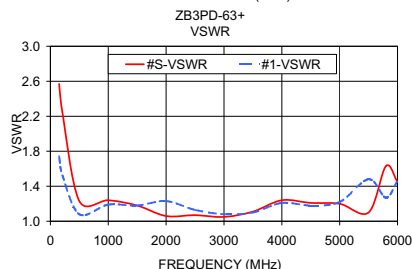
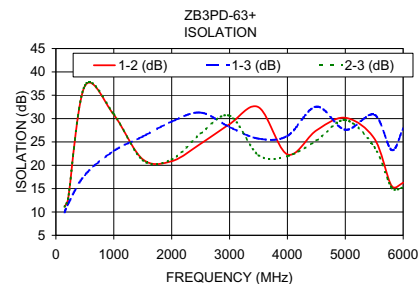
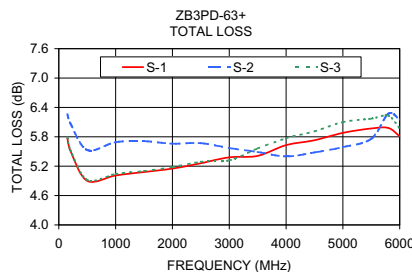
Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		150		6000	MHz
Insertion Loss Above 4.8 dB	150-600	—	1.0	1.5	dB
	600-5000	—	0.5	2.1	
	5000-6000	—	1.5	2.2	
Isolation	150-600	8	—	—	dB
	600-5000	16	20	—	
	5000-6000	12	—	—	
Phase Unbalance	150-600	—	3	5	Degree
	600-5000	—	7	16	
	5000-6000	—	7	16	
Amplitude Unbalance	150-600	—	0.7	1.0	dB
	600-5000	—	0.7	1.0	
	5000-6000	—	0.7	1.0	

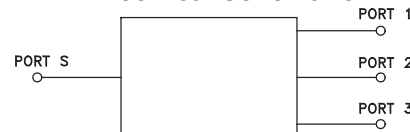
Typical Performance Data

Freq. (MHz)	Total Loss ¹ (dB)			Amp. Unbal. (dB)	Isolation (dB)			Phase Unbal. (deg.)	VSWR S	VSWR 1	VSWR 2	VSWR 3
	S-1	S-2	S-3		1-2	1-3	2-3					
150.00	5.77	6.26	5.79	0.50	11.14	9.91	11.16	1.34	2.57	1.74	1.37	1.74
210.00	5.50	6.06	5.52	0.57	12.73	11.71	12.75	0.96	2.23	1.52	1.23	1.53
500.00	4.90	5.53	4.92	0.63	36.94	17.90	37.05	0.71	1.23	1.08	1.21	1.08
1000.00	5.01	5.69	5.04	0.67	30.82	23.07	30.96	2.37	1.24	1.19	1.26	1.21
1500.00	5.08	5.71	5.10	0.63	21.28	26.16	21.10	4.33	1.18	1.18	1.38	1.20
2000.00	5.15	5.66	5.18	0.51	20.88	29.36	21.26	5.79	1.06	1.23	1.63	1.24
2500.00	5.26	5.67	5.29	0.41	24.60	31.29	26.78	6.97	1.07	1.13	1.55	1.13
3000.00	5.38	5.57	5.32	0.24	28.81	28.18	30.62	8.10	1.05	1.08	1.38	1.06
3500.00	5.41	5.49	5.56	0.15	32.44	25.70	22.15	9.08	1.11	1.10	1.17	1.12
4000.00	5.63	5.40	5.77	0.37	22.33	26.28	21.96	8.59	1.24	1.21	1.28	1.26
4500.00	5.73	5.48	5.91	0.43	27.47	32.57	25.31	6.68	1.21	1.18	1.57	1.20
5000.00	5.88	5.59	6.10	0.51	30.17	27.61	29.67	6.45	1.20	1.22	1.58	1.25
5500.00	5.97	5.76	6.17	0.41	25.74	30.83	23.91	2.67	1.10	1.48	1.57	1.46
5800.00	5.98	6.27	6.23	0.29	15.58	23.27	15.18	3.03	1.63	1.27	1.36	1.27
6000.00	5.81	6.15	5.97	0.35	16.27	27.88	15.25	6.79	1.45	1.46	1.55	1.48

1. Total Loss = Insertion Loss + 4.8dB splitter loss.



Electrical Schematic



For detailed performance specs & shipping online see web site

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