

Power Splitter/Combiner

3 Way-0° 50Ω 500 to 2200 MHz

ZB3PD1-222+



CASE STYLE: UU188-1

Connectors	Model
N-TYPE	ZB3PD1-222-N+
SMA	ZB3PD1-222-S+

+RoHS Compliant

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

Maximum Ratings

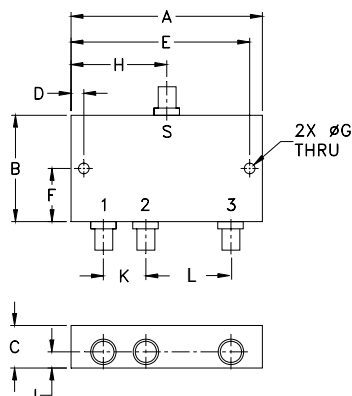
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	10W max.
Internal Dissipation	0.5W max.
DC Current	900 mA (300 mA for each port)

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

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
3.50	2.13	.88	.150	3.350	1.06
88.90	54.10	22.35	3.81	85.09	26.92
G	H	J	K	L	wt
.125	1.75	.44	.89	1.78	grams
3.18	44.45	11.18	22.61	45.21	240

Features

- wideband, 500-2200 MHz
- good isolation, 25 dB typ.
- excellent input VSWR, 1.15:1 typ.
- excellent output VSWR, 1.1:1 typ.
- low insertion loss 0.3 dB typ.

Applications

- cellular
- PCN
- instrumentation

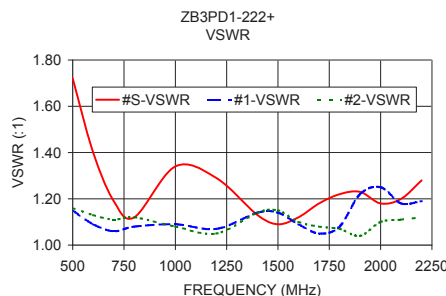
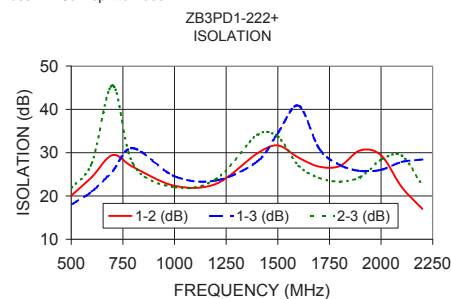
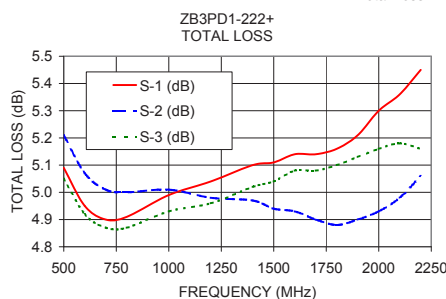
Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)		INSERTION LOSS (dB) ABOVE 4.8 dB		PHASE UNBALANCE (Degrees)	AMPLITUDE UNBALANCE (dB)	VSWR (:1)	
f _L -f _U	Typ.	Min.	Typ.	Max.	Max.	Max.	S Typ.	OUT Typ.
500-2200	25	14	0.3	1.0	—	0.7	1.2	1.2
700-2000	25	19	0.3	0.8	—	0.6	1.15	1.1

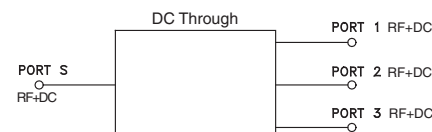
Typical Performance Data

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					
500.00	5.09	5.21	5.05	0.16	20.07	17.97	21.78	39.63	1.72	1.15	1.16	1.14
600.00	4.95	5.07	4.92	0.15	24.39	21.03	27.60	47.64	1.40	1.09	1.13	1.03
700.00	4.90	5.01	4.87	0.14	29.43	25.74	45.53	55.71	1.19	1.06	1.11	1.03
800.00	4.91	5.00	4.87	0.13	26.68	31.00	27.31	63.77	1.12	1.08	1.12	1.04
1000.00	4.99	5.01	4.93	0.08	22.35	24.56	22.02	79.82	1.34	1.09	1.08	1.07
1200.00	5.04	4.98	4.96	0.08	22.77	23.56	23.87	95.78	1.29	1.07	1.05	1.11
1400.00	5.10	4.97	5.02	0.13	29.82	27.96	34.10	111.66	1.13	1.14	1.14	1.14
1500.00	5.11	4.94	5.04	0.17	31.68	34.53	33.67	119.64	1.09	1.14	1.15	1.30
1600.00	5.14	4.93	5.08	0.21	28.86	40.86	27.00	127.62	1.12	1.09	1.10	1.24
1700.00	5.14	4.90	5.08	0.24	26.78	30.93	24.18	135.63	1.18	1.05	1.08	1.08
1800.00	5.16	4.88	5.10	0.28	26.92	27.17	23.33	143.56	1.22	1.08	1.07	1.03
1900.00	5.21	4.90	5.13	0.31	30.55	25.78	24.40	151.20	1.23	1.22	1.04	1.08
2000.00	5.30	4.93	5.16	0.36	29.40	26.04	28.37	158.77	1.18	1.25	1.10	1.24
2100.00	5.36	4.98	5.18	0.38	22.06	27.87	29.32	166.51	1.20	1.18	1.11	1.41
2200.00	5.45	5.06	5.16	0.39	17.00	28.41	22.43	174.23	1.28	1.19	1.12	1.53

1. Total Loss = Insertion Loss + 4.8dB 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.
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