

# POWER SPLITTERS/COMBINERS

50&75Ω

## 4 WAY-0° 2 kHz to 8.4 GHz



ZBSC-4



ZFSC-4



ZMSC-4



ZSC-4

MODEL NO.	FREQ. RANGE MHz $f_L$ - $f_U$	ISOLATION dB						INSERTION LOSS, dB Above 6dB						PHASE UNBALANCE Degrees			AMPLITUDE UNBALANCE dB			CASE STYLE Note B	CONNECTION	PRICE \$ Qty. (1-9)
		L Typ.	L Min.	M Typ.	M Min.	U Typ.	U Min.	L Typ.	L Max.	M Typ.	M Max.	U Typ.	U Max.	L Max.	M Max.	U Max.	L Max.	M Max.	U Max.			
ZBSC-413	10-800	26	20	18	15	18	15	0.6	1.0	1.0	1.5	1.6	2.0	4	8	8	0.2	0.4	0.6	UU102	bh	99.95
ZFSC-4-1	1-1000	25	20	23	18	20	15	0.4	1.2	0.6	1.5	1.6	2.5	4	8	8	0.2	0.4	0.7	G15	bh	89.95
ZFSC-4-1W	10-500	23	20	23	20	23	20	0.6	1.5	0.6	1.5	0.6	1.5	4	8	8	0.2	0.3	0.4	G15	bh	84.95
ZFSC-4-3	10-300	32	28	38	30	38	30	0.5	0.8	0.6	0.9	0.9	1.2	4	6	8	0.1	0.1	0.2	G15	bh	78.95
■ ZFSC-4375	50-90	34	30	34	30	34	30	0.3	0.8	0.3	0.8	0.3	0.8	4	6	8	0.15	0.15	0.15	G15	bh	89.95
■ ZFSC-4-175	10-1000	35	25	38	20	22	18	0.5	0.8	0.6	1.2	0.9	2.0	—	—	—	0.2	0.3	0.6	G15	bh	89.95
■ ZFSC-4-175W	5-1000	34	22	36	22	27	20	0.5	0.8	0.5	1.2	0.9	1.9	1	3	5	0.2	0.2	0.5	G15	bh	89.95
ZMSC-4-1	0.1-200	33	20	30	20	27	20	0.4	0.6	0.5	0.75	0.7	1.0	4	6	8	0.15	0.20	0.25	N24	bh	66.95
✦ ZMSC-4-2	0.002-20	30	20	33	25	33	25	0.45	0.75	0.3	0.5	0.7	1.0	4	6	8	0.15	0.20	0.25	N24	bh	76.95
ZMSC-4-3	0.25-250	33	20	30	20	27	20	0.4	0.7	0.5	0.75	0.7	1.2	4	6	10	0.15	0.20	0.25	N24	bh	64.95
ZSC-4-1	0.1-200	33	20	30	20	27	20	0.4	0.6	0.5	0.75	0.7	1.0	4	6	8	0.15	0.20	0.25	N27	bh	59.95
■ ZSC-4-1-75	1-200	30	20	25	20	25	20	0.4	0.7	0.5	0.8	0.7	1.2	4	6	10	0.15	0.20	0.30	N27	bh	59.95
✦ ZSC-4-2	0.002-20	30	20	33	25	33	25	0.45	0.75	0.3	0.5	0.7	1.0	4	6	8	0.15	0.20	0.25	N27	bh	74.95
ZSC-4-3	0.25-250	33	20	30	20	27	20	0.4	0.7	0.5	0.75	0.7	1.2	4	6	10	0.15	0.20	0.25	N27	bh	56.95
■ ZSC-4-3-75	0.25-250	28	20	30	20	27	20	0.4	0.8	0.3	0.7	0.5	1.0	1	2	3	0.15	0.20	0.25	N27	bh	56.95

L = low range [ $f_L$  to  $10 f_L$ ]

M = mid range [ $10 f_L$  to  $f_U/2$ ]

U = upper range [ $f_U/2$  to  $f_U$ ]

### NOTES:

- Denotes 75 Ohm model, for coax connector models 75 Ohm BNC connectors are standard.
- ✦ When specification for only M range given, specification applies to entire frequency range.
- ▲ Available only with SMA connectors.
- ✦ At low range frequency band ( $f_L$  to  $10 f_L$ ), linearly derate maximum power by 13 dB.
- \* Maximum VSWR: input 1.5:1, output 1.3:1
- A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in section 0, see "Mini-Circuits Guarantees Quality" article.
- B. Connector types and case mounted options, case finishes are given in section 0, see "Case styles & Outline Drawings".
- C. Prices and specifications subject to change without notice.
- 1. Absolute maximum power, voltage and current ratings:
  - 1a. Matched power rating,
    - Models ZA4PD, ZB4PD, ZB4PD1(except -500,-500-75) 10W
    - ZN4PDZC4PD, ZN4PD1 ..... 10W
    - Model ZC4PD-18 ..... 5 W
    - All other models ..... 1W
  - 1b. Internal load dissipation,
    - Models ZB4PD-1750-75, ZN4PD1 ..... 0.750W
    - Models ZA4PD, ZB4PD-4, ZB4PD, ..... 0.375W
    - Models ZB4PD1, ZN4PD, ZC4PD ..... 0.375W
    - Model ZFSC-4-175W ..... 0.5W
    - All other models ..... 0.250W



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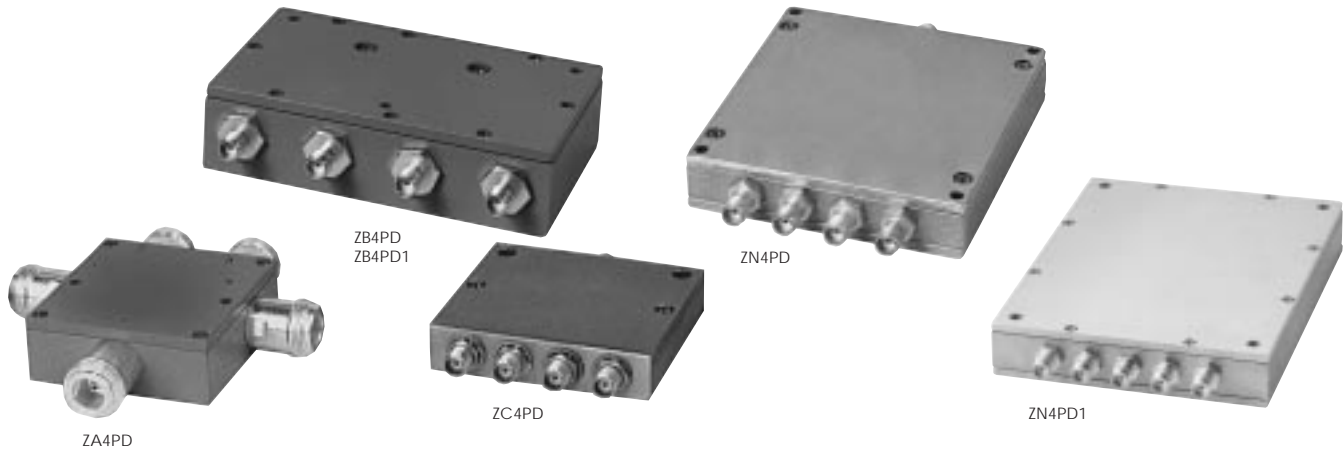
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021017

## Coaxial



MODEL NO.	FREQ. RANGE MHz  f <sub>L</sub> -f <sub>U</sub>	ISOLATION dB			INSERTION LOSS, dB Above 6dB			PHASE UNBAL. Degrees			AMPLITUDE UNBAL. dB			VSWR (:1)		CASE STYLE  Note B	C O N N E C T I O N	PRICE \$  Qty. (1-9)				
		L	M°	U	L	M°	U	L	M°	U	L	M°	U	S	OUT							
		Typ. Min.	Typ. Min.	Typ. Min.	Typ. Max.	Typ. Max.	Typ. Max.	Max.	Max.	Max.	Max.	Max.	Max.	Typ. Max.	Typ. Max.							
ZA4PD-2	1000-2000		25	16		0.3	1.0		6		0.70					DD52	bh	89.95				
ZA4PD-4	2000-4200		25	16		0.5	1.0		16		0.80					DD52	bh	89.95				
ZB4PD-1750-75	875-1750		30	20		0.4	0.8		3		0.40		1.08	1.50	1.25	1.50	UU188	bh	99.95			
ZB4PD-42	1700-4200		23	16		0.5	1.4		8		0.80						Z54	bh	99.95			
ZB4PD-4	3700-4200		24	15		0.6	1.1		8		0.80						Z54	bh	94.95			
ZB4PD-6.4	5400-6800		25	18		0.6	1.2		9		0.90		1.15	1.30	1.10	1.30	UU188	bh	99.95			
ZB4PD1-500	5-500	34	20	34	20	28	20	0.4	1.0	0.5	0.9	0.9	1.5	1	3	6	0.2	0.2	0.4	UU188	bh	79.95
ZB4PD1-500-75	5-500	34	20	34	20	30	20	0.45	1.0	0.6	0.9	1.0	1.5	1	3	6	0.20			UU188	bh	89.95
ZB4PD1-930	850-930		30	20		0.3	0.5		5		0.25			1.10	1.25	1.09	1.25			UU188	bh	99.95
ZB4PD1-930W	725-1050		22	15		0.3	0.8		5		0.40		1.20	1.80	1.10	1.30				UU188	bh	94.95
ZB4PD1-2000	800-2000		25	18		0.6	1.2		—		0.30		1.20	1.60	1.10	1.30				UU188	bh	94.95
ZB4PD1-5.8	4600-5800		25	16		0.4	0.9		5		0.40		1.10	1.60	1.15	1.55				UU188	bh	129.95
ZB4PD1-8.4	6700-8400		29	18		0.5	1.3		9		0.90		1.12	1.50	1.27	1.50				UU188	bh	149.95
ZC4PD-18	1000-1800		32	18		0.3	0.8		6		0.40		1.05	1.55	1.08	1.45				Z184	bh	91.95
ZC4PD-900	800-900		30	20		0.3	0.6		3		0.20		1.08	1.25	1.17	1.30				Z184	bh	89.95
ZN4PD-920	800-920		30	20		0.25	0.5		2		0.20		1.08	1.25	1.07	1.25				UU182	bh	84.95
ZN4PD-920W	670-1000		22	15		0.3	0.6		3		0.20		1.20	1.60	1.07	1.25				UU182	bh	79.95
ZN4PD-20	1800-2000		31	20		0.3	0.7		4		0.50									UU182	bh	89.95
ZN4PD1-50	500-5000		23	13		0.9	1.8		8		0.60		1.30	—	1.10	—				UU846	nj	99.95
	500-1600		23	15		0.7	1.4		4		0.60		1.30	—	1.10	—						
	1600-2700		23	17		0.8	1.4		7		0.60		1.30	—	1.10	—						
	2700-3600		22	16		1.1	1.7		7		0.60		1.30	—	1.10	—						
	3700-4800		22	14		1.2	1.7		8		0.60		1.30	—	1.10	—						

L = low range [ $f_L$  to  $10 f_L$ ]

M = mid range [ $10 f_L$  to  $f_U/2$ ]

U = upper range [ $f_U/2$  to  $f_U$ ]

### coaxial connections

see case style outline drawing

PORT	bh	nj
SUM PORT	S	3
PORT 1	1	1
PORT 2	2	2
PORT 3	3	4
PORT 4	4	5

### NSN GUIDE

MCL NO.	NSN
ZB4PD1-500(SMA)	5985-01-476-2218
ZBSC-413(SMA)	5985-01-370-6145
ZFSC-4-1	6625-01-303-4623
ZFSC-4-1(SMA)	6625-01-303-4623
ZFSC-4-1A	5825-01-227-6681
ZFSC-4-1W(SMA)	5985-01-372-6418
ZFSC-4-1WB(SMA)	5985-01-364-1944
ZFSC-4-3B	5985-01-253-2843
ZMSC-4-1B	4935-01-229-3228
ZMSC-4-1BR	5895-01-451-0601
ZSC-4-1B	5820-00-270-3056
ZSC-4-1B(BNC)	6625-00-270-3056
ZSC-4-1B(TNC)	6625-01-109-3707
ZSC-4-1-75	5998-01-228-8995
ZSC-4-2BR	6625-01-357-2227
ZSC-4-2B(BNC)	5820-01-120-5238
ZSC-4-3B	6625-01-038-8553



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