

# POWER SPLITTERS/COMBINERS

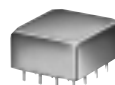
50&amp;75Ω

## 8 WAY-0° 10 kHz to 1000 MHz

SURFACE MOUNT



JCPS-8



PSC-8



PSC-8A

MODEL NO.	FREQ. RANGE MHz $f_L$ - $f_U$	ISOLATION dB						INSERTION LOSS, dB Above 9dB						PHASE UNBALANCE Degrees			AMPLITUDE UNBALANCE dB			CASE STYLE Note B	CONNECTION	PRICE \$ Qty. (1-9)
		L Typ.	M <sup>o</sup> Min.	U Typ.	L Min.	M <sup>o</sup> Typ.	U Min.	L Typ.	M <sup>o</sup> Max.	U Typ.	L Max.	M <sup>o</sup> Max.	U Max.	L Max.	M <sup>o</sup> Max.	U Max.	L Max.	M <sup>o</sup> Max.	U Max.			
NEW ◆ JCPS-8-10	5-1000	34	20	22	16	20	15	0.5	1.5	1.2	2.2	1.8	3.0	5	10	15	1.0	0.7	1.3	BG291	hn	39.95
◆ JCPS-8-10-75	5-1000	34	20	25	15	20	13	0.8	1.5	1.0	2.5	1.8	3.0	3	8	10	0.4	0.5	1.3	BG291	hn	71.95
◆ JCPS-8-850-75	10-850	34	20	25	15	20	15	0.7	1.5	1.0	2.0	1.8	3.0	—	—	—	0.6	0.7	1.0	BG291	hn	69.95
◆ JCPS-8-850	10-850	34	20	25	17	20	15	0.8	1.5	1.0	2.5	1.8	3.0	5	10	15	0.6	0.7	1.0	BG291	hn	69.95
PSC-8-1	0.5-175	30	25	30	20	25	18	0.8	1.2	0.8	1.2	1.0	1.6	1.0	2.5	5.0	0.2	0.3	0.5	C07	bp	74.95
PSC-8-1W	10-600	25	20	23	16	20	16	1.0	1.8	1.2	2.2	1.7	2.8	2.0	4.0	10.0	0.3	0.6	0.9	C07	bp	109.95
■ PSC-8-1-75	0.5-175	25	20	30	20	25	20	0.5	1.0	0.6	1.1	0.7	1.3	1.0	2.5	5.0	0.2	0.2	0.3	C07	bp	78.95
⊕ PSC-8-6	0.01-10	40	20	40	25	28	23	0.3	1.0	0.5	1.0	0.6	1.0	4.0	2.5	4.0	0.4	0.2	0.3	C07	bp	93.95
PSC-8A-4	5-500	25	20	23	18	20	15	0.7	1.2	1.0	1.8	1.4	2.5	3.0	8.0	16.0	0.2	0.3	0.5	E10	bq	103.95
■ PSC-8A4-75	1-300	26	20	30	25	30	23	0.8	1.2	0.7	1.1	0.9	1.3	1.0	3.0	8.0	0.2	0.2	0.4	E10	br	93.95

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  $f_U$ ]

see suggested PCB layouts: PL-037 for JCPS models (50Ω)

PL-074 for JCPS models (75Ω)

## NOTES:

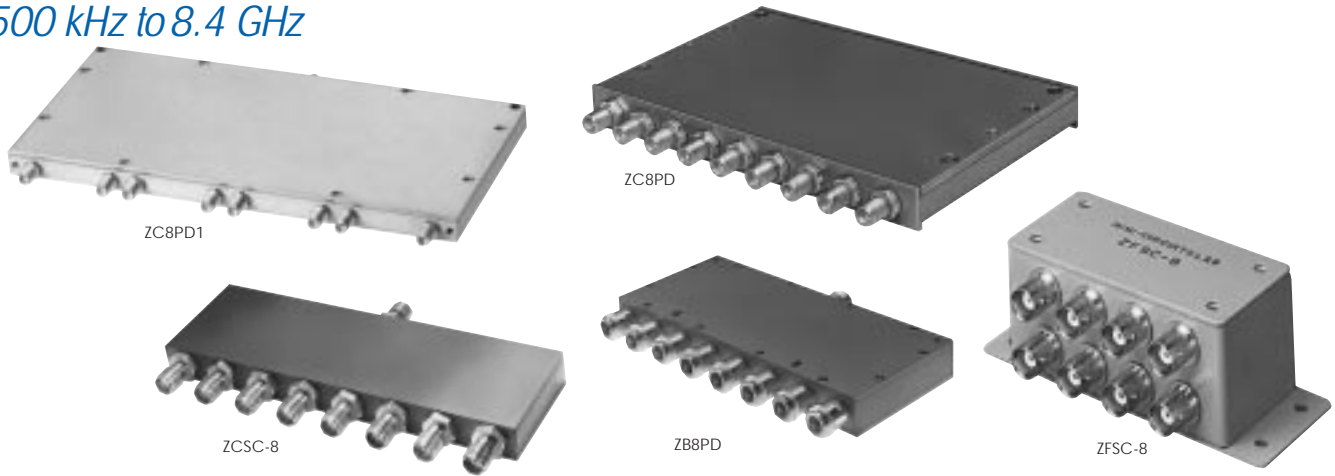
- ◆ Aqueous washable
- Non-hermetic
- \* VSWR, input 1.06:1 typical, 1.2:1 max; output 1.17:1 typical, 1.35:1 max
- \*\* VSWR, input 1.22:1 typical, 1.5:1 max; output 1.11:1 typical, 1.30:1 max
- \*\*\* VSWR, input 1.25:1 typical, 1.8:1 max; output 1.10:1 typical 1.40:1 max
- ⊕ Below 0.1 MHz power handling decrease as to typically 15 dBm at 0.01 MHz, 23 dBm at 0.025 MHz, and 29 dBm at 0.05 MHz.
- 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.
- A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in General Information (Section 0).
- 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 ZB8PD, ZC8PD .....	10 Watt
Model JCPS-8-10 .....	0.5 Watt
All other models, .....	1 Watt
  - 1b. Internal load dissipation,
 

Model ZC8PD1 .....	2 Watt
Models JCPS-8-850/75, JCPS-8-10 .....	0.875 Watt
ZB8PD, ZC8PD .....	0.875 Watt
All other models, .....	0.62 Watt

# Surface Mount <sup>□</sup>, Plug-In & Coaxial

## 500 kHz to 8.4 GHz



MODEL NO.	FREQ. RANGE MHz $f_l$ - $f_u$	ISOLATION dB			INSERTION LOSS, dB Above 9dB			PHASE UNBALANCE Degrees			AMPLITUDE UNBALANCE dB			CASE STYLE Note B	CONNECTION	PRICE \$ Qty. (1-9)						
		L Typ. Min.	M <sup>o</sup> Typ. Min.	U Typ. Min.	L Typ. Max.	M <sup>o</sup> Typ. Max.	U Typ. Max.	L Max.	M <sup>o</sup> Max.	U Max.	L Max.	M <sup>o</sup> Max.	U Max.									
NEW ZC8PD-900*	800-900		30	20		0.4	0.7		5.0		0.4		AB186	—	158.95							
ZC8PD1-10	300-1000		27	17		0.6	1.4		8.0		0.7		DE749	—	169.95							
ZCSC-8-1	2-250	37	27	30	20	24	18	0.65	1.2	0.8	1.2	1.0	1.6	2.0	4.0	8.0	0.2	0.3	0.5	UU215	—	119.95
ZFSC-8-1	0.5-175	30	25	30	20	25	18	0.8	1.2	0.8	1.2	1.0	1.6	1.0	2.5	5.0	0.2	0.2	0.3	R29	—	99.95
■ ZFSC-8-1-75	0.5-175	25	20	30	20	25	20	0.5	1.0	0.6	1.1	0.7	1.3	1.0	2.5	5.0	0.2	0.3	0.5	R29	—	102.95
■ ZFSC-8-4-75	5-1000	35	20	25	16	20	15	0.4	1.0	0.6	1.6	1.6	2.7	2.0	7.0	13.0	0.3	0.5	1.2	R29	—	139.95
■ ZFSC-84-75	1-300	26	20	30	25	30	23	0.8	1.5	0.7	1.1	0.9	1.5	4.0	3.0	8.0	0.2	0.2	0.4	R29	—	119.95
■ ZFSC-8375	50-90	30	25	30	25	25	25	1.0	1.0	1.0	1.3	1.3	1.3	2.0	2.0	2.0	0.2	0.2	0.2	R29	—	119.95
ZFSC-8-4	5-700	35	20	25	17	20	17	0.8	1.2	1.2	1.8	1.8	2.5	2.0	5.0	15.0	0.2	0.4	0.7	R29	—	128.95
ZFSC-8-43	10-1000	23	20	25	20	26	20	1.0	1.6	1.4	2.1	2.1	2.9	5.0	10.0	20.0	0.4	0.4	0.7	R29	—	138.95
ZB8PD-1**	800-960		30	20		0.4	0.9		8.0		0.4		Z41	—	138.95							
ZB8PD-2	1000-2000		24	17		0.8	1.3		18.0		0.8		Z41	—	138.95							
ZB8PD-4	2000-4200		23	16		0.8	1.8		10.0		1.2		Z41	—	138.95							
▲ ZB8PD-6.4	5600-6800		26	18		0.8	1.7		15.0		0.7		Z41	—	138.95							
ZB8PD-8.4	7200-8400		25	20		0.9	1.6		15.0		0.8		Z41	—	149.95							
ZB8PD-2000***	800-2000		26	18		0.8	1.7		—		0.7		Z41	—	149.95							
■ ZB8PD-22-75	950-2200		24	16		0.7	1.6		—		0.7		Z41	—	189.95							

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  $f_u$ ]

### pin connections

see case style outline drawings for pin locations

PORT	bp	bq	br	hn
SUM PORT	2	29	29	1
PORT 1	1	7	7	3
PORT 2	5	16	16	4
PORT 3	9	31	31	5
PORT 4	13	24	24	6
PORT 5	16	9	9	9
PORT 6	12	2	2	10
PORT 7	8	26	26	11
PORT 8	4	17	17	12
GND EXT.	3,6,7,14,15	—	—	2,7,8,13,14
CASE GND	3,6,7,14,15	all other pins	all other pins	2,7,8,13,14
NOT USED	10,11	4,5,15	15	—
DEMO BOARD	—	—	—	TB-134 (50Ω) TB-136 (75Ω)

### NSN GUIDE

MCL NO.	NSN
PSC-8-1	6625-01-365-5615
ZB8PD-1(N)	5985-01-482-9739
ZB8PD-2 (SMA)	5895-01-499-6724
ZB8PD-4(SMA)	5985-01-372-8880
ZCSC-8-1	5895-01-495-8803
ZFSC-8-1	5895-01-495-8803
ZFSC-8-1(BNC)	5820-01-136-7244
ZFSC-8-1(SMA)	6620-01-223-1235
ZFSC-8-1-75	5895-01-326-8664
ZFSC-8-43(SMA)	6625-01-333-1125
ZFSC-8375	5895-01-229-0156

