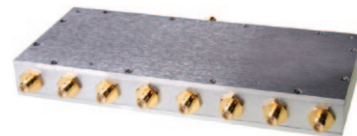


# Coaxial Power Splitter/Combiner

8 Way-0° 50Ω 800 to 960 MHz

## ZB8PD-1+ ZB8PD-1



SMA version shown  
CASE STYLE: Z41

| Connectors | Model        | Price    | Qty.  |
|------------|--------------|----------|-------|
| SMA        | ZB8PD-1-S(+) | \$138.95 | (1-9) |
| N-TYPE     | ZB8PD-1-N(+) | \$138.95 | (1-9) |

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

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

### Maximum Ratings

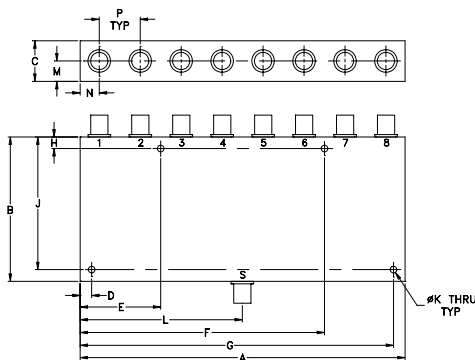
|                             |                |
|-----------------------------|----------------|
| Operating Temperature       | -55°C to 100°C |
| Storage Temperature         | -55°C to 100°C |
| Power Input (as a splitter) | 10W max.       |
| Internal Dissipation        | 0.875W max.    |

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

### Coaxial Connections

|                      |                 |
|----------------------|-----------------|
| SUM PORT             | S               |
| PORT 1,2,3,4,5,6,7,8 | 1,2,3,4,5,6,7,8 |

### Outline Drawing



### Outline Dimensions (inch/mm)

|        |       |       |       |       |        |        |      |
|--------|-------|-------|-------|-------|--------|--------|------|
| A      | B     | C     | D     | E     | F      | G      | H    |
| 7.06   | 3.13  | .88   | .250  | 1.750 | 5.310  | 6.810  | .250 |
| 179.32 | 79.50 | 22.35 | 6.35  | 44.45 | 134.87 | 172.97 | 6.35 |
| J      | K     | L     | M     | N     | P      | wt     |      |
| 2.875  | .144  | 3.53  | .44   | .415  | .89    | grams  |      |
| 73.03  | 3.66  | 89.66 | 11.18 | 10.54 | 22.61  | 800    |      |

### Features

- low insertion loss, 0.4 dB typ.
- high isolation, 30 dB typ.
- up to 10W power input as splitter
- rugged shielded case

### Applications

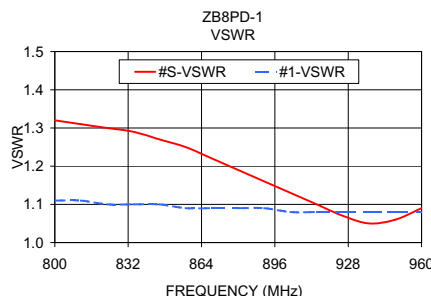
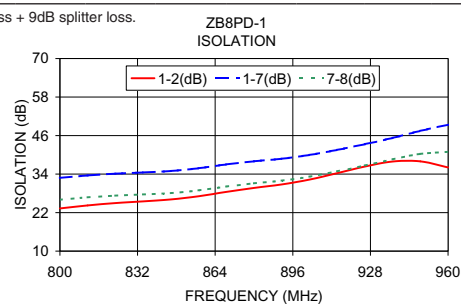
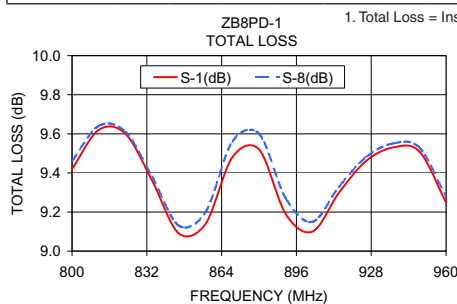
- cellular
- UHF
- instrumentation
- signal processing

### Electrical Specifications

| FREQ. RANGE (MHz)              | ISOLATION (dB) |      | INSERTION LOSS (dB) ABOVE 9.0 dB |      | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) | VSWR (:1) |      |      |      |
|--------------------------------|----------------|------|----------------------------------|------|---------------------------|--------------------------|-----------|------|------|------|
|                                | Typ.           | Min. | Typ.                             | Max. |                           |                          | S         |      | OUT  |      |
| f <sub>c</sub> -f <sub>u</sub> |                |      |                                  |      | Max.                      | Max.                     | Typ.      | Max. | Typ. | Max. |
| 800-960                        | 30             | 20   | 0.4                              | 0.9  | 8.0                       | 0.4                      | 1.22      | 1.5  | 1.11 | 1.30 |

### Typical Performance Data

| Frequency (MHz) | Total Loss <sup>1</sup> (dB) |      |      |      |      |      | Amplitude Unbalance (dB) | Isolation (dB) |       |       |       | VSWR S | VSWR 1 | VSWR 8 |
|-----------------|------------------------------|------|------|------|------|------|--------------------------|----------------|-------|-------|-------|--------|--------|--------|
|                 | S-1                          | S-2  | S-3  | S-4  | S-6  | S-8  |                          | 1-2            | 1-7   | 3-4   | 7-8   |        |        |        |
| 800.00          | 9.42                         | 9.45 | 9.42 | 9.45 | 9.49 | 9.46 | 0.07                     | 23.29          | 32.82 | 23.68 | 26.01 | 1.32   | 1.11   | 1.08   |
| 811.42          | 9.62                         | 9.65 | 9.65 | 9.65 | 9.67 | 9.64 | 0.06                     | 24.24          | 33.57 | 24.69 | 26.75 | 1.31   | 1.11   | 1.08   |
| 822.85          | 9.60                         | 9.63 | 9.64 | 9.63 | 9.64 | 9.61 | 0.05                     | 24.97          | 34.12 | 25.50 | 27.29 | 1.30   | 1.10   | 1.08   |
| 834.28          | 9.36                         | 9.38 | 9.41 | 9.39 | 9.40 | 9.38 | 0.06                     | 25.51          | 34.52 | 26.14 | 27.66 | 1.29   | 1.10   | 1.07   |
| 845.71          | 9.09                         | 9.09 | 9.13 | 9.11 | 9.13 | 9.13 | 0.07                     | 26.10          | 34.96 | 26.84 | 28.08 | 1.27   | 1.10   | 1.07   |
| 857.14          | 9.14                         | 9.12 | 9.15 | 9.16 | 9.19 | 9.20 | 0.09                     | 27.10          | 35.81 | 27.99 | 28.92 | 1.25   | 1.09   | 1.07   |
| 868.57          | 9.48                         | 9.45 | 9.47 | 9.49 | 9.54 | 9.56 | 0.11                     | 28.46          | 37.01 | 29.51 | 30.12 | 1.22   | 1.09   | 1.07   |
| 880.00          | 9.52                         | 9.50 | 9.49 | 9.53 | 9.59 | 9.60 | 0.11                     | 29.68          | 37.99 | 30.92 | 31.13 | 1.19   | 1.09   | 1.06   |
| 891.42          | 9.19                         | 9.20 | 9.17 | 9.21 | 9.27 | 9.27 | 0.10                     | 30.77          | 38.78 | 32.25 | 31.96 | 1.16   | 1.09   | 1.06   |
| 902.85          | 9.10                         | 9.12 | 9.08 | 9.12 | 9.17 | 9.15 | 0.09                     | 32.29          | 39.95 | 34.11 | 33.19 | 1.13   | 1.08   | 1.06   |
| 914.28          | 9.30                         | 9.34 | 9.32 | 9.33 | 9.37 | 9.33 | 0.06                     | 34.28          | 41.53 | 36.49 | 34.86 | 1.10   | 1.08   | 1.06   |
| 925.71          | 9.46                         | 9.50 | 9.49 | 9.50 | 9.52 | 9.48 | 0.06                     | 36.35          | 43.31 | 38.76 | 36.69 | 1.07   | 1.08   | 1.06   |
| 937.14          | 9.53                         | 9.57 | 9.58 | 9.57 | 9.58 | 9.55 | 0.05                     | 37.93          | 45.26 | 39.51 | 38.59 | 1.05   | 1.08   | 1.06   |
| 948.57          | 9.51                         | 9.52 | 9.55 | 9.54 | 9.55 | 9.53 | 0.05                     | 37.96          | 47.45 | 37.83 | 40.29 | 1.06   | 1.08   | 1.05   |
| 960.00          | 9.25                         | 9.24 | 9.27 | 9.27 | 9.29 | 9.28 | 0.07                     | 36.08          | 49.39 | 35.03 | 40.93 | 1.09   | 1.08   | 1.06   |



### electrical schematic



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