

Coaxial

# Power Splitter/Combiner

8 Way 50Ω 800 to 2000 MHz

## ZB8PD-2000+



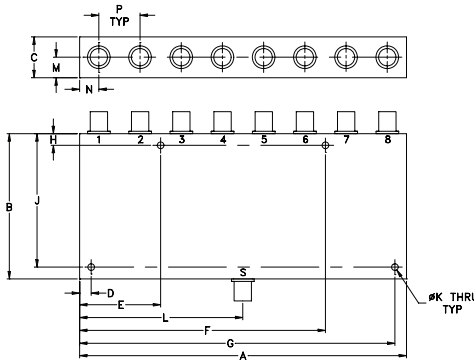
### Maximum Ratings

|                                                                 |                |
|-----------------------------------------------------------------|----------------|
| 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

- wideband, 800 to 2000 MHz
- low insertion loss, 0.8 dB typ.
- good isolation, 26 dB typ.
- up to 10W power input
- rugged, shielded case

### Applications

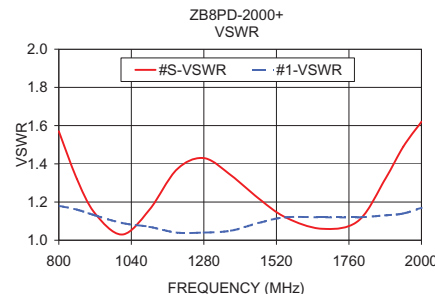
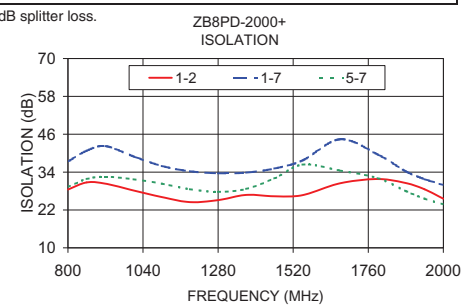
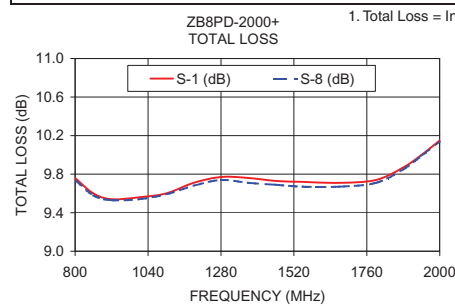
- cellular
- PCS/DCS
- communication systems
- GPS

### Electrical Specifications

| FREQ. RANGE (MHz)              | ISOLATION (dB) |      | INSERTION LOSS (dB) ABOVE 9.0 dB |      | AMPLITUDE UNBALANCE (dB) | VSWR (:1) |      |      |      |
|--------------------------------|----------------|------|----------------------------------|------|--------------------------|-----------|------|------|------|
|                                | Typ.           | Min. | Typ.                             | Max. |                          | S         |      | OUT  |      |
| f <sub>L</sub> -f <sub>U</sub> |                |      |                                  |      | Max.                     | Typ.      | Max. | Typ. | Max. |
| 800-2000                       | 26             | 18   | 0.8                              | 1.7  | 0.7                      | 1.25      | 1.8  | 1.10 | 1.40 |

### Typical Performance Data

| Freq. (MHz) | Total Loss <sup>1</sup> (dB) |       |       |       |       |       | Amp. Unb. (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   | 5-7   |        |        |        |
| 800.00      | 9.76                         | 9.73  | 9.79  | 9.79  | 9.79  | 9.74  | 0.09           | 28.47          | 37.32 | 28.73 | 29.35 | 1.57   | 1.18   | 1.18   |
| 860.00      | 9.60                         | 9.59  | 9.66  | 9.65  | 9.66  | 9.58  | 0.11           | 30.74          | 40.77 | 29.19 | 31.82 | 1.32   | 1.16   | 1.17   |
| 920.00      | 9.54                         | 9.53  | 9.61  | 9.61  | 9.62  | 9.53  | 0.12           | 30.34          | 42.25 | 27.83 | 32.55 | 1.14   | 1.13   | 1.14   |
| 1010.00     | 9.56                         | 9.54  | 9.63  | 9.61  | 9.62  | 9.54  | 0.11           | 28.17          | 38.97 | 27.10 | 31.74 | 1.03   | 1.09   | 1.11   |
| 1100.00     | 9.60                         | 9.59  | 9.68  | 9.67  | 9.68  | 9.59  | 0.13           | 26.08          | 35.94 | 26.63 | 30.33 | 1.16   | 1.07   | 1.08   |
| 1190.00     | 9.71                         | 9.69  | 9.81  | 9.80  | 9.81  | 9.68  | 0.14           | 24.48          | 34.27 | 28.30 | 28.57 | 1.37   | 1.04   | 1.05   |
| 1280.00     | 9.77                         | 9.74  | 9.87  | 9.87  | 9.88  | 9.74  | 0.16           | 25.11          | 33.63 | 33.65 | 27.75 | 1.43   | 1.04   | 1.02   |
| 1370.00     | 9.76                         | 9.73  | 9.86  | 9.86  | 9.87  | 9.71  | 0.18           | 26.76          | 33.85 | 31.28 | 28.67 | 1.34   | 1.05   | 1.03   |
| 1460.00     | 9.73                         | 9.72  | 9.86  | 9.86  | 9.86  | 9.69  | 0.20           | 26.34          | 35.13 | 30.13 | 32.02 | 1.22   | 1.09   | 1.08   |
| 1550.00     | 9.72                         | 9.71  | 9.90  | 9.88  | 9.89  | 9.67  | 0.25           | 26.69          | 37.70 | 30.05 | 36.39 | 1.12   | 1.12   | 1.12   |
| 1670.00     | 9.71                         | 9.70  | 9.97  | 9.94  | 9.96  | 9.67  | 0.30           | 30.47          | 44.42 | 27.53 | 34.49 | 1.06   | 1.12   | 1.13   |
| 1790.00     | 9.74                         | 9.73  | 10.04 | 9.99  | 10.02 | 9.71  | 0.33           | 31.81          | 39.60 | 30.28 | 32.09 | 1.10   | 1.12   | 1.14   |
| 1880.00     | 9.87                         | 9.85  | 10.14 | 10.08 | 10.13 | 9.85  | 0.30           | 30.53          | 34.25 | 33.42 | 27.99 | 1.32   | 1.13   | 1.16   |
| 1940.00     | 10.00                        | 9.98  | 10.23 | 10.15 | 10.21 | 9.99  | 0.25           | 28.54          | 31.79 | 33.03 | 25.57 | 1.49   | 1.14   | 1.18   |
| 2000.00     | 10.15                        | 10.12 | 10.31 | 10.24 | 10.29 | 10.14 | 0.19           | 25.57          | 29.90 | 31.37 | 23.78 | 1.62   | 1.17   | 1.20   |



### electrical schematic



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