

# Power Splitter/Combiner

## ZC6PD-1900W+

6 Way-0° 50Ω 1500 to 2000 MHz

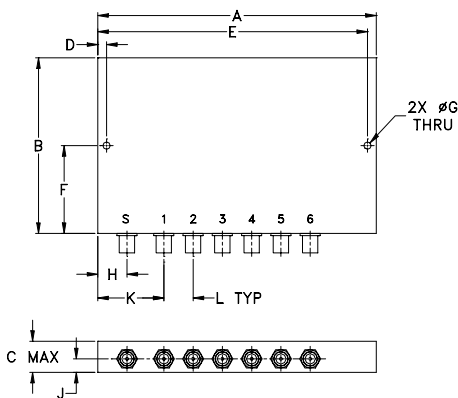
### Maximum Ratings

|                                                                 |                           |
|-----------------------------------------------------------------|---------------------------|
| 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.               |
| DC Current                                                      | 1.8A(300mA for each port) |
| Permanent damage may occur if any of these limits are exceeded. |                           |

### Coaxial Connections

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

### Outline Drawing



### Outline Dimensions (inch/mm)

| A      | B     | C     | D     | E      | F     |
|--------|-------|-------|-------|--------|-------|
| 4.76   | 3.00  | .53   | .150  | 4.610  | 1.500 |
| 120.90 | 76.20 | 13.46 | 3.81  | 117.09 | 38.10 |
| G      | H     | J     | K     | L      | wt    |
| .125   | .50   | .25   | 1.13  | .50    | grams |
| 3.18   | 12.70 | 6.35  | 28.70 | 12.70  | 155   |

### Features

- low insertion loss, 0.5 dB typ.
- high isolation, 30 dB typ.
- up to 10W power input as splitters
- rugged shielded case

### Applications

- GPS
- PCS
- communication systems
- instrumentation



CASE STYLE: AB185

| Connectors | Model          |
|------------|----------------|
| SMA        | ZC6PD-1900W-S+ |

**+RoHS Compliant**

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

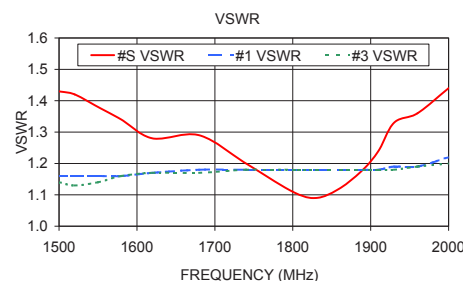
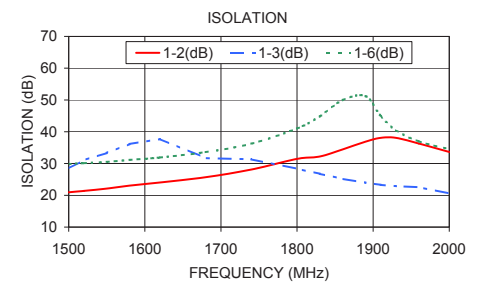
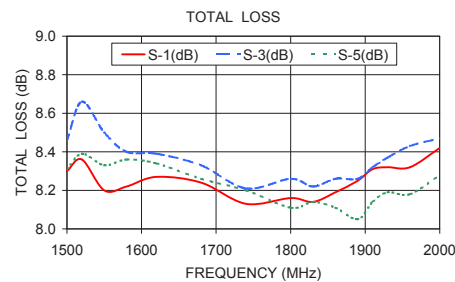
### Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) |      | INSERTION LOSS (dB) ABOVE 7.8 dB |      | AMPLITUDE UNBALANCE (dB) | VSWR (:1) |      |      |      |
|-------------------|----------------|------|----------------------------------|------|--------------------------|-----------|------|------|------|
|                   | Typ.           | Min. | Typ.                             | Max. |                          | S         |      | OUT  |      |
| $f_L$ - $f_U$     |                |      |                                  |      | Max.                     | Typ.      | Max. | Typ. | Max. |
| 1500-2000         | 30             | 15   | 0.5                              | 1.0  | 0.6                      | 1.1       | 1.68 | 1.1  | 1.5  |

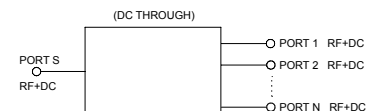
### Typical Performance Data

| Frequency (MHz) | Total Loss <sup>1</sup> (dB) |      |      | Amplitude Unbalance (dB) | Isolation (dB) |       |       | VSWR S | VSWR 1 | VSWR 3 |
|-----------------|------------------------------|------|------|--------------------------|----------------|-------|-------|--------|--------|--------|
|                 | S-1                          | S-2  | S-3  |                          | 1-2            | 1-3   | 1-6   |        |        |        |
| 1500.00         | 8.30                         | 8.46 | 8.31 | 0.21                     | 20.94          | 28.46 | 29.86 | 1.43   | 1.16   | 1.14   |
| 1520.00         | 8.36                         | 8.66 | 8.39 | 0.35                     | 21.38          | 31.08 | 30.12 | 1.42   | 1.16   | 1.13   |
| 1550.00         | 8.20                         | 8.50 | 8.33 | 0.37                     | 22.11          | 33.34 | 30.54 | 1.38   | 1.16   | 1.14   |
| 1580.00         | 8.22                         | 8.40 | 8.36 | 0.36                     | 23.06          | 36.14 | 31.15 | 1.34   | 1.16   | 1.16   |
| 1620.00         | 8.27                         | 8.39 | 8.34 | 0.18                     | 24.03          | 37.71 | 31.91 | 1.28   | 1.17   | 1.17   |
| 1680.00         | 8.24                         | 8.33 | 8.26 | 0.11                     | 25.71          | 31.69 | 33.60 | 1.29   | 1.18   | 1.17   |
| 1740.00         | 8.13                         | 8.21 | 8.20 | 0.18                     | 28.12          | 31.33 | 36.26 | 1.20   | 1.18   | 1.18   |
| 1800.00         | 8.16                         | 8.26 | 8.11 | 0.17                     | 31.45          | 28.35 | 41.05 | 1.11   | 1.18   | 1.18   |
| 1830.00         | 8.14                         | 8.22 | 8.14 | 0.11                     | 32.22          | 26.76 | 44.85 | 1.09   | 1.18   | 1.18   |
| 1860.00         | 8.19                         | 8.26 | 8.11 | 0.17                     | 34.45          | 25.19 | 50.00 | 1.12   | 1.18   | 1.18   |
| 1890.00         | 8.25                         | 8.26 | 8.05 | 0.24                     | 36.88          | 23.95 | 51.21 | 1.18   | 1.18   | 1.18   |
| 1910.00         | 8.31                         | 8.32 | 8.14 | 0.23                     | 38.07          | 23.29 | 44.96 | 1.24   | 1.18   | 1.18   |
| 1930.00         | 8.32                         | 8.37 | 8.19 | 0.21                     | 38.09          | 22.88 | 40.44 | 1.33   | 1.19   | 1.18   |
| 1960.00         | 8.32                         | 8.43 | 8.18 | 0.30                     | 36.29          | 22.57 | 36.99 | 1.36   | 1.19   | 1.19   |
| 2000.00         | 8.42                         | 8.47 | 8.28 | 0.24                     | 33.63          | 20.59 | 34.49 | 1.44   | 1.22   | 1.20   |

1. Total Loss = Insertion Loss + 7.8dB 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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