

Coaxial

Power Splitter/Combiner

ZAPD-20+

2 Way-0° 50Ω 700 to 2000 MHz



N-Type version shown

CASE STYLE: F53

| Connectors | Model | Price | Qty. |
|------------|------------|---------|-------|
| N-TYPE | ZAPD-20-N+ | \$64.95 | (1-9) |
| SMA | ZAPD-20-S+ | \$64.95 | (1-9) |

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

The +Suffix has been added in order to identify 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 | 0.125W max. |

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

Coaxial Connections

| | |
|----------|---|
| SUM PORT | S |
| PORT 1 | 1 |
| PORT 2 | 2 |

Features

- wideband, 700 to 2000 MHz
- low insertion loss, 0.3 dB typ.
- high isolation, 30 dB typ.
- up to 10W power input as splitter
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 1 deg. typ.
- excellent VSWR, 1.1:1 typ.
- rugged shielded case

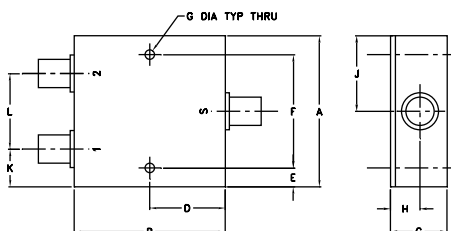
Applications

- cellular
- GPS
- PCS/DCS
- instrumentation

Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | INSERTION LOSS (dB) ABOVE 3.0 dB | | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) | VSWR (:1) | | | | | | |
|--------------------------------|----------------|------|----------------------------------|------|---------------------------|--------------------------|-----------|--------|----------|----------|--|--|--|
| | Typ. | Min. | Typ. | Max. | | | S Typ. | S Max. | OUT Typ. | OUT Max. | | | |
| f _L -f _H | | | | | Max. | Max. | | | | | | | |
| 700-2000 | 30 | 20 | 0.3 | 0.7 | 3 | 0.4 | 1.15 | 1.35 | 1.1 | 1.3 | | | |

Outline Drawing

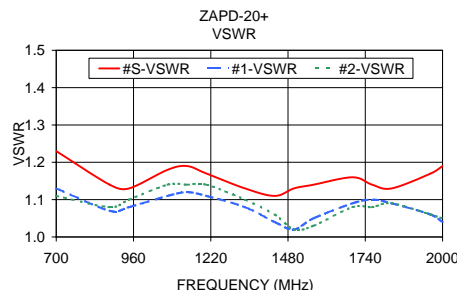
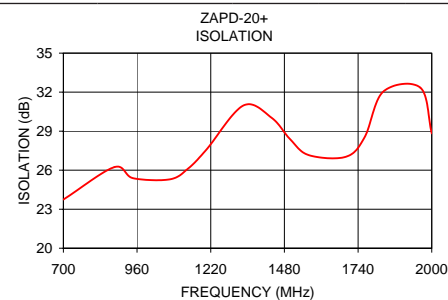
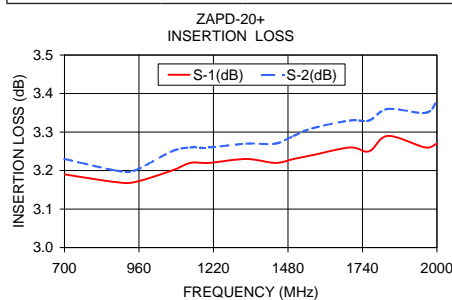


Outline Dimensions (inch/mm)

| | | | | | | | | | |
|-------|-------|-------|-------|------|-------|------|-------|--|--|
| A | B | C | D | E | F | G | | | |
| 2.00 | 2.00 | .75 | 1.00 | .13 | 1.750 | .125 | | | |
| 50.80 | 50.80 | 19.05 | 25.40 | 3.30 | 44.45 | 3.18 | | | |
| H | J | K | L | | | | wt | | |
| .39 | 1.00 | .50 | 1.00 | | | | grams | | |
| 9.91 | 25.40 | 12.70 | 25.40 | | | | 170.0 | | |

Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) | | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|---------------------|------|--------------------------|----------------|------------------------|--------|--------|--------|
| | S-1 | S-2 | | | | | | |
| 700.00 | 3.19 | 3.23 | 0.04 | 23.74 | 0.29 | 1.23 | 1.13 | 1.11 |
| 880.00 | 3.17 | 3.20 | 0.04 | 26.24 | 0.50 | 1.14 | 1.07 | 1.08 |
| 945.00 | 3.17 | 3.20 | 0.03 | 25.39 | 0.54 | 1.13 | 1.08 | 1.10 |
| 1075.00 | 3.20 | 3.25 | 0.05 | 25.29 | 0.59 | 1.18 | 1.11 | 1.14 |
| 1140.00 | 3.22 | 3.26 | 0.04 | 26.12 | 0.61 | 1.19 | 1.12 | 1.14 |
| 1205.00 | 3.22 | 3.26 | 0.04 | 27.59 | 0.60 | 1.17 | 1.11 | 1.14 |
| 1335.00 | 3.23 | 3.27 | 0.04 | 30.97 | 0.64 | 1.13 | 1.08 | 1.10 |
| 1435.00 | 3.22 | 3.27 | 0.04 | 30.03 | 0.53 | 1.11 | 1.04 | 1.06 |
| 1500.00 | 3.23 | 3.29 | 0.05 | 28.39 | 0.51 | 1.13 | 1.02 | 1.02 |
| 1566.00 | 3.24 | 3.31 | 0.06 | 27.16 | 0.66 | 1.14 | 1.05 | 1.03 |
| 1697.00 | 3.26 | 3.33 | 0.07 | 27.03 | 0.71 | 1.16 | 1.09 | 1.08 |
| 1763.12 | 3.25 | 3.33 | 0.08 | 28.54 | 0.69 | 1.14 | 1.10 | 1.08 |
| 1828.75 | 3.29 | 3.36 | 0.07 | 32.04 | 0.78 | 1.13 | 1.09 | 1.09 |
| 1960.00 | 3.26 | 3.35 | 0.09 | 32.34 | 0.94 | 1.17 | 1.06 | 1.06 |
| 2000.00 | 3.27 | 3.38 | 0.10 | 28.83 | 0.83 | 1.19 | 1.04 | 1.05 |



electrical schematic



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IFIRF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

REV. D
M113397
ZAPD-20+
HY/TD/CP
090824

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.