DC Pass
Power Splitter/Combiner ZAPD-2DC+
2 Way-0°  50Ω  950 to 2150 MHz

The Big Deal
•Excellent for GPS and satellite distribution
•DC pass through, 500 mA, 25V
•L Band coverage: 950 to 2150 MHz
•Low insertion loss: 0.25 dB Typ

Product Overview
The ZAPD-2DC+ 2way power splitter/combiner offers excellent RF performance in a small package. The DC pass through feeds DC on the coaxial center conductor from Port 1 to the Sum to support remote amplifier power. Built in a rugged shielded case, the ZAPD-2DC+ is available with three connector options: BNC, SMA and N-Type.

The ZAPD-2DC+ is well suited tower mounted amplifiers, GPS and satellite distribution or any other application where a high performance splitter with DC pass through is required.

Key Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Pass through</td>
<td>Enables remote powering of antenna mounted amplifiers while splitting the RF signal. Eliminates additional cable runs. Designed to handle up to ½ Amp at 25 Volts, the ZAPD-2DC+ can support a wide variety of remotely powered RF equipment.</td>
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<tr>
<td>Wide bandwidth</td>
<td>Operating over the 950 to 2150 MHz Band, the ZAPD-2DC+ is ideally suited for L-Band Satellite Communications Applications. In addition, this broadband coverage supports additional applications such as GPS, Cellular PCS and DCS</td>
</tr>
<tr>
<td>Low Insertion Loss</td>
<td>With 0.25 dB typical Insertion Loss, the ZAPD-2DC+ can be used in sensitive receive paths with minimized concern for additional Signal to Noise Ratio degradation.</td>
</tr>
<tr>
<td>Excellent Phase and Amplitude Balance</td>
<td>Industry leading Phase and Amplitude balance enables this power splitter to be an ideal candidate for phase and amplitude matched or tracked systems.</td>
</tr>
</tbody>
</table>
**DC Pass**

**Power Splitter/Combiner**

2 Way-0° 50Ω 950 to 2150 MHz

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**Maximum Ratings**

- **Operating Temperature**: -40°C to 85°C
- **Storage Temperature**: -55°C to 100°C
- **Power Input (as a splitter)**: 10W max.
- **Internal Dissipation**: 0.125W max.
- **DC Voltage**: 25V max.
- **DC Current**: 500mA max.

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

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**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. The parts covered by this specification document 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

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**Coaxial Connections**

- **SUM PORT 1**: S (RF+DC)
- **PORT 1**: 1 (RF+DC)
- **PORT 2**: 2 (RF)

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**Applications**

- **GPS**
- **satellite distribution**
- **PCS/DCS**
- **communications systems**

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**Electrical Specifications**

**FEATURE**

- **Low insertion loss, 0.25 dB typ.**
- **Good isolation, 25 dB typ.**
- **dc pass, 500mA current**
- **Good isolation, 25 dB typ.**
- **Low insertion loss, 0.25 dB typ.**
- **Excellent amplitude unbalance, 0.1 dB typ.**
- **Good phase unbalance, 2 deg. typ.**
- **Excellent VSWR, 1.1:1 typ.**
- **Rugged shielded case**

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**Applications**

**Features**

- **Communications systems**
- **Satellite distribution**
- **GPS**
- **DC pass, 500mA current**
- **Good isolation, 25 dB typ.**
- **Low insertion loss, 0.25 dB typ.**

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**Outline Drawing**

**Case Style F14**

**Outline Dimensions (inches)**

- **A**: 2.00
- **B**: 2.00
- **C**: 0.75
- **D**: 1.00
- **E**: 0.25
- **F**: 1.50
- **G**: 0.125

**Case Style F1164**

**Outline Dimensions (inches)**

- **A**: 2.00
- **B**: 1.75
- **C**: 0.75
- **D**: 0.875
- **E**: 0.13
- **F**: 1.750
- **G**: 0.125

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**Typical Performance Data**

**Frequency (MHz)**

- **Total Loss (dB)**
- **Amplitude Unbalance (dB)**
- **Phase Unbalance (Degrees)**
- **VSFR (1)**

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**Case Style F14**

**Case Style F1164**

**Features**

- **Low insertion loss, 0.25 dB typ.**
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