### 20 dB, Bi-Directional Coupler, 1 - 1000 MHz

#### Features

- Broad Frequency Range
- Constant Coupling—Within ± 0.5 dB Max
- VSWR: 1.3:1 Max
- •

### Description

Bi-Directional Couplers offer the ability to couple the power in two directions while maintaining directivity.



Rev. V3



Dimensions in ( ) are in mm. Unless Otherwise Noted: .xxx =  $\pm 0.015$  (.x =  $\pm 0.4$ ) WEIGHT (APPROX.): 2.5 OUNCES 71 GRAMS

## Electrical Specifications<sup>1</sup>: $T_A = -55^{\circ}C$ to $+85^{\circ}C$

| Parameter                   | Test Conditions | Frequency                    | Units          | Min      | Тур  | Max             |
|-----------------------------|-----------------|------------------------------|----------------|----------|------|-----------------|
| Coupling                    | Input to Output | 1-1000 MHz                   | dB             | 19.0     | 20.0 | 21.0            |
| Coupling Flatness           | —               | 10 - 500 MHz<br>1 - 1000 MHz | dB<br>dB       |          |      | ± 0.25<br>± 0.5 |
| VSWR                        | All Ports       | 10 - 500 MHz<br>1 - 1000 MHz | Ratio<br>Ratio |          | _    | 1.2:1<br>1.3:1  |
| Directivity                 | Both Directions | 10 - 500 MHz<br>1 - 1000 MHz | dB<br>dB       | 25<br>20 | _    |                 |
| Main Line Loss <sup>2</sup> | _               | 10 - 500 MHz<br>1 - 1000 MHz | dB<br>dB       |          | _    | 0.5<br>0.7      |

**C-8** 

1. All specifications apply with 50 ohm source and load impedance.

2. Includes theoretical power split.

This product contains elements protected by United States Patent umber 3,426,298.

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Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. M/A-CO. Commitment to produce in volume is not guaranteed. changes

# CH-132



Rev. V3

20 dB, Bi-Directional Coupler, 1 - 1000 MHz

## **Functional Diagram**



### **Ordering Information**

| Part Number | Package       |  |  |
|-------------|---------------|--|--|
| CH-132 BNC  | Connectorized |  |  |
| CH-132 N    | Connectorized |  |  |
| CH-132 SMA  | Connectorized |  |  |
| CH-132 TNC  | Connectorized |  |  |

### **Typical Performance Curves**









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