CH- / CHS-134

Bi-Directional Couplers, 10 - 500 MHz



Rev. V3

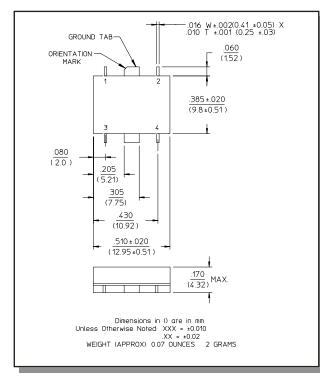
Features

- n Constant Coupling Within ± 0.5 dB Max.
- n MIL-STD-202 Screening Available

Description

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

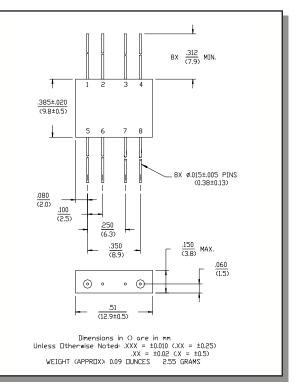
SF-1 (CHS-134)



Pin Configuration (CHS-134)

| Pin No. | Function | Pin No. | Function |
|---------|----------|---------|----------|
| 1 | С | 3 | А |
| 2 | В | 4 | D |

FP-2 (CH-134)



Pin Configuration (CH-134)

| Pin No. | Function | Pin No. Functio | |
|---------|----------|-----------------|-----|
| 1 | С | 5 | А |
| 2 | GND | 6 | GND |
| 3 | GND | 7 | GND |
| 4 | В | 8 | D |

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

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• North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

India Tel: +91.80.43537383
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology 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. Commitment to produce in volume is not guaranteed.

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

CH- / CHS-134



Bi-Directional Couplers, 10 - 500 MHz

Electrical Specifications¹: $T_A = -55^{\circ}C$ to $+85^{\circ}C$

| Parameter | Test Conditions | Frequency | Units | Min | Тур | Max |
|-----------------------------|-----------------|------------------------------|----------------|------|------|----------------|
| Coupling | Input to Output | | dB | 10.1 | 10.8 | 11.5 |
| Coupling Flatness | _ | _ | dB | | | ± 0.5 |
| VSWR | All Ports | 10 - 500 MHz 25 - 200 MHz | Ratio Ratio | _ | | 1.8:1 1.5:1 |
| Directivity | Both Directions | | dB | 20 | _ | — |
| Main Line Loss ² | _ | | dB | — | _ | 1.6 |
| Input Power | _ | _ | Watt | — | _ | 1.0 |

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

2. Includes theoretical power split.

4 Q

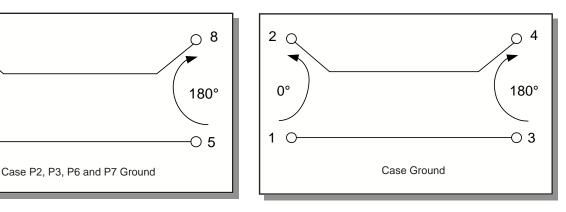
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1 O

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

Functional Diagram (CH-134)

Functional Diagram (CHS-134)



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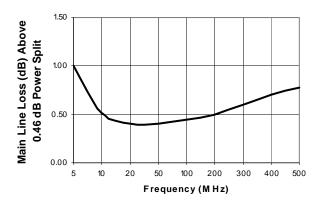
CH- / CHS-134



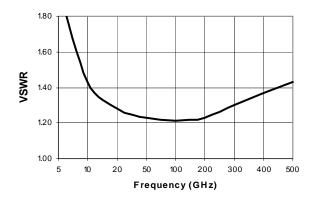
Rev. V3

Typical Performance Curves

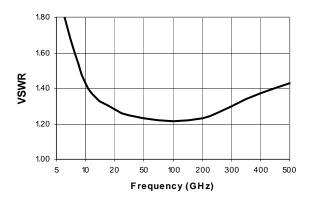
Main Line Loss



VSWR



Coupling



Ordering Information

| Part Number | Package | |
|-------------|---------|--|
| CH-134 PIN | FP-2 | |
| CHS-134 PIN | SF-1 | |

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Directivity

