

# Bi-Directional Couplers, 10 - 500 MHz

Rev. V3

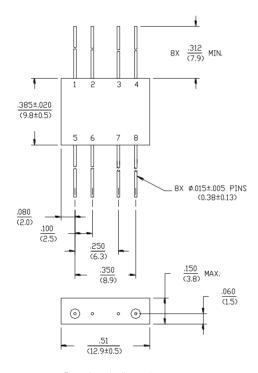
#### **Features**

- Constant Coupling within ±0.5 dB max.
- MIL-STD-202 Screening Available

### **Description**

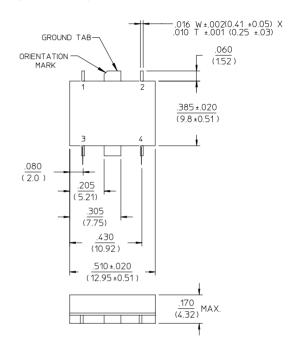
Bi-Directional couplers offer the ability to couple the power in two directions while maintaining directivity.

### FP-2 (CH-134)



| Dimensions in () are in mm | Unless | Otherwise Noted: .XXX = ±0.010 (.XX = ±0.25) | XX = ±0.02 (.X = ±0.5) | WEIGHT (APPROX): 0.09 | OUNCES | 2.55 GRAMS

## SF-1 (CHS-134)



Dimensions in 0 are in mm Unless Otherwise Nated: XXX =  $\pm 0.010$  .XX =  $\pm 0.02$  WEIGHT (APPROX): 0.07 OUNCES 2 GRAMS

## **Pin Configuration**

Pin No.	Function	Pin No.	Function
1	С	3	Α
2	В	4	D

# **Pin Configuration**

Pin No.	Function	Pin No.	Function	
1	С	5	Α	
2	GND	6	GND	
3	GND	7	GND	
4	В	8	D	

## **Ordering Information**

Part Number	Package		
CH-134-PIN	FP-2 (flat pack)		
CHS-134-PIN	SF-1 (surface mount)		

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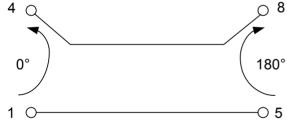
# Electrical Specifications<sup>1</sup>: $T_A = -55$ °C to +85°C

Parameter	Test Conditions	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	_	_	1.8:1 1.5:1
Directivity	Both Directions	dB	20	_	
Main Line Loss <sup>2</sup>	_	dB	_	_	1.6
Input Power	_	W	_		1.0

<sup>1.</sup> All specifications apply with 50 ohm source and load impedance.

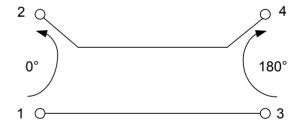
This product contains elements protected by United States Patent umber 3,426,298.

### **Functional Diagram (CH-134)**



Case P2, P3, P6 and P7 Ground

## **Functional Diagram (CHS-134)**



Case Ground

<sup>2.</sup> Includes theoretical power split.

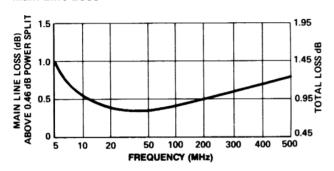


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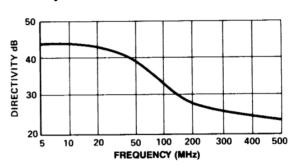
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## **Typical Performance Curves**

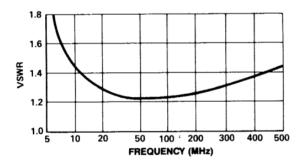
#### Main Line Loss



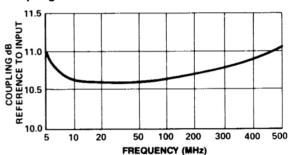
#### Directivity



#### **VSWR**



#### Coupling



# CH-/CHS-134



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