

CH- / CHS-137

19.5 dB Bi-Directional Couplers,
0.5 - 400 MHz

Rev. V4

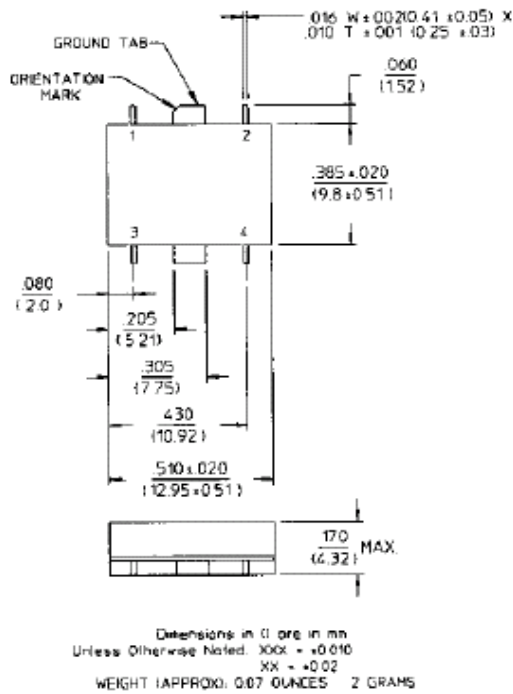
Features

- Low Cost
- Convenient Plug-In Mounting
- Fully Hermetic Package (CHS-137)
- MIL-STD-202 Screening Available

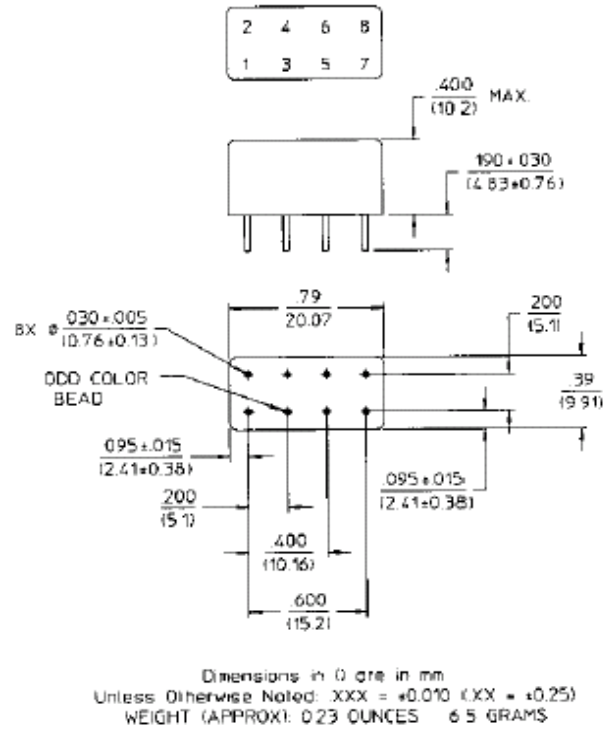
Description

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

SF-1 (CHS-137)



RH-1 (CH-137)



Pin Configuration (CH-137)

Pin No.	Function	Pin No.	Function
1		5	GND
2	GND	6	
3		7	GND
4		8	GND

Pin Configuration (CHS-137)

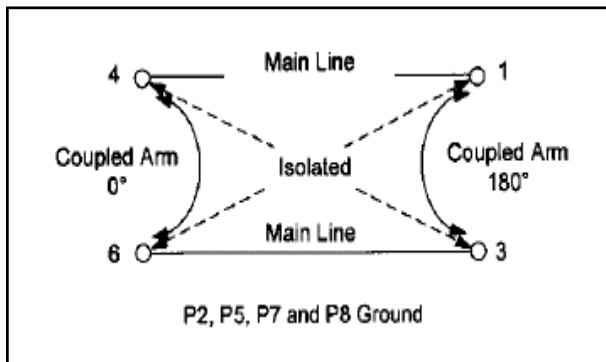
Pin No.	Function	Pin No.	Function
1	C	3	A
2	B	4	D

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

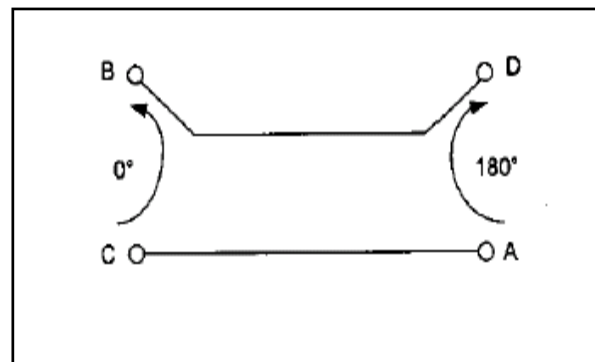
Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Coupling	Input to Output	0.5 - 200 MHz	dB	19.0	19.5	20.0
		200 - 400 MHz	dB	19.0	20.0	21.0
VSWR	All Ports	5 - 200 MHz	Ratio	—	—	1.2:1
		0.5 - 400 MHz	Ratio	—	—	1.5:1
Directivity	Both Directions	0.5 - 50 MHz	dB	30	—	—
		50 - 200 MHz	dB	20	—	—
		200 - 400 MHz	dB	15	—	—
Main Line Loss ²	—	0.5 - 50 MHz	dB	—	—	0.5
		50 - 200 MHz	dB	—	—	0.4
		200 - 400 MHz	dB	—	—	0.6
Input Power	—	—	Watt	—	—	3.0

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 number 3,426,298.

Functional Diagram (CH-137)



Functional Diagram (CHS-137)



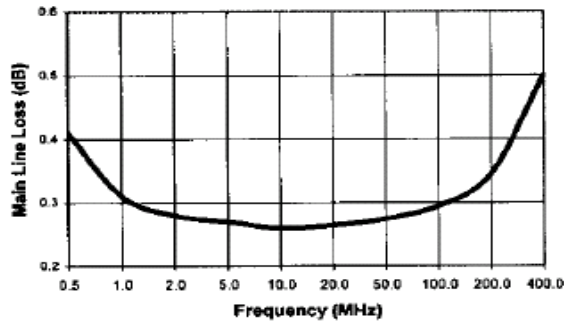
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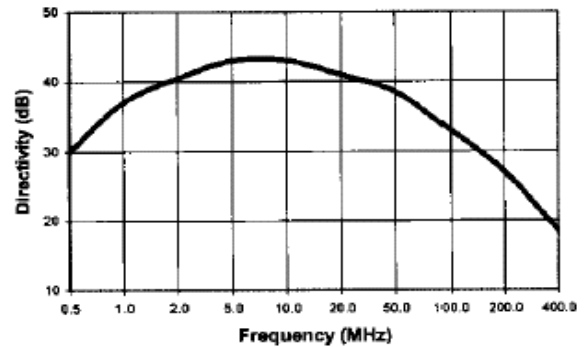
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Typical Performance Curves

Main Line Loss



Directivity



Ordering Information

Part Number	Package
CH-137 PIN	RH-1
CHS-137 PIN	SF-1

Coupling

