

## Features

- 0° - 180° Hybrid in TO-5 Package
- High Isolation
- MIL-STD-883 Screening Available

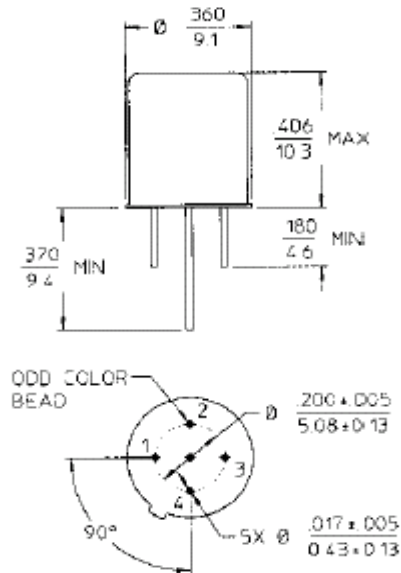
## TO-5-2

## Description

3 dB Hybrids are ideal for dividing a signal into two signals of equal amplitude and a constant 90° or 180° phase differential and for Quadrature combining or performing summation/differential combining.

## Pin Configuration

Pin No.	Function	Pin No.	Function
1	A	3	D
2	B	7	C



Lower dimensions are in mm  
Unless otherwise noted: .XXX = ±0.10 (XX = ±0.25)  
XX = ±0.2 (X = ±0.5)  
Weight (Approx): 0.11 Ounces 3 Grams

## Electrical Specifications<sup>1</sup>: T<sub>A</sub> = -55°C to +85°C

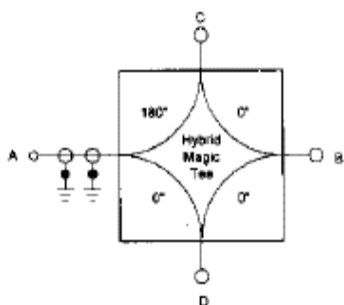
Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	Less Coupling	20 - 300 MHz	dB	—	—	1.0
Isolation	—	20 - 300 MHz	dB	28	—	—
Amplitude Balance <sup>2</sup>	—	20 - 300 MHz	dB	—	—	0.25
VSWR	—	20 - 300 MHz	Ratio	—	—	1.3:1
Phase Balance <sup>2</sup>	—	20 - 300 MHz	°	—	—	2
Impedance	—	20 - 300 MHz	Ohms	—	50	—
Input Power	—	20 - 300 MHz	Watts	—	—	0.5

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

This product contains elements protected by United States Patent number 3,508,171

2. Differences measure between C & D feeding A or B.

## Functional Diagram

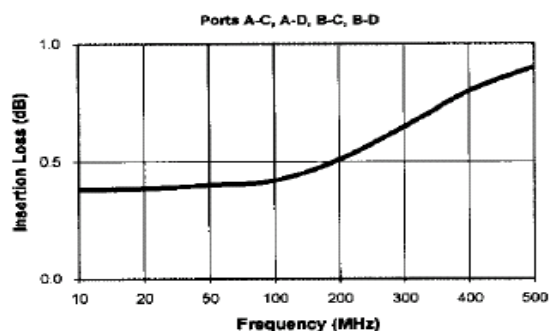


## Ordering Information

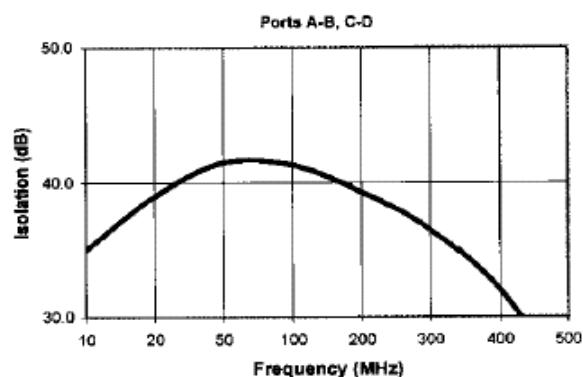
Part Number	Package
HH-105 PIN	TO-5-2

## Typical Performance Curves

**Insertion Loss**



**Isolation**



**VSWR**

