

## Surface Mount Quadrature Hybrid, 200 - 400 MHz

Rev. V3

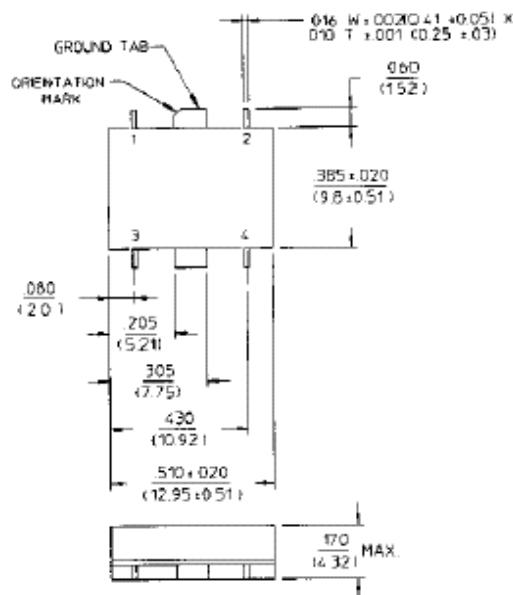
### Features

- Fully Hermetic
- Octave Bandwidth
- Low VSWR: 1.1:1 Typical
- Impedance: 50 Ohms Nominal
- Input Power: 5 Watts Max @ +25°C, Derated to 1 Watt @ +85°C
- Typical Phase Linearity: 3° from straight line
- MIL-STD-202 Screening Available

### 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.

### SF-1



### Phasing Diagram

IN \ OUT	A	B	C	D
A	X	ISO	-90°	0°
B	ISO	X	0°	-90°
C	-90°	0°	X	ISO
D	0°	-90°	ISO	X

### Pin Configuration

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

### Electrical Specifications<sup>1</sup>: Freq. = 200 - 400 MHz, T<sub>A</sub> = -55°C to +85°C

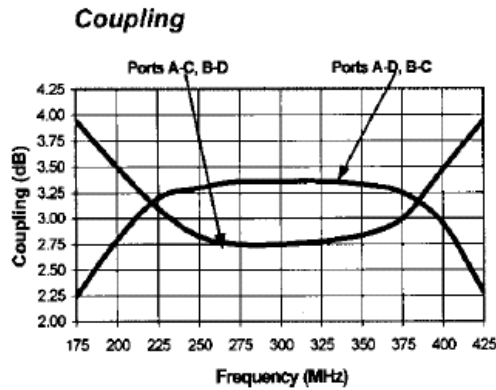
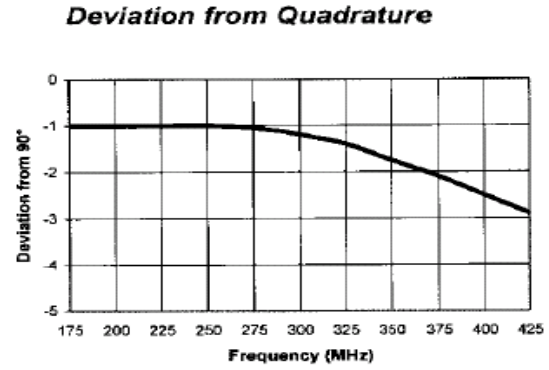
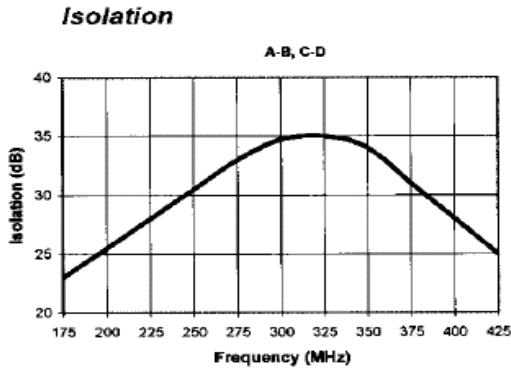
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss <sup>2</sup>	Less Coupling	dB	—	—	0.5
Isolation	—	dB	18	—	—
Amplitude Balance	—	dB	—	—	1.0
VSWR	—	Ratio	—	—	1.3:1
Deviation from Quadrature	—	°	—	—	4

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

2. Average of coupled output less 3 dB.

This product contains elements protected by United States Patent Number 3,484,724.

## Typical Performance Curves



## Ordering Information

Part Number	Package
JHS-142 PIN	SF-1

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