

## Surface Mount Quadrature Hybrid, 40 - 80 MHz

Rev. V3

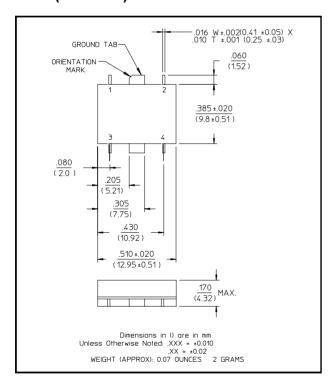
#### **Features**

- Fully Hermetic Package
- 3° Maximum Phase Deviation from 90°
- Low Loss: 0.5 dB Max.
- Impedance: 50 Ohms Nominal
- Input Power: Watts Max. Derated to 1 Watt @ 100°C
- Typical Phase Linearity: 3° from Straight Line
- MIL-STD-202 Screening Available

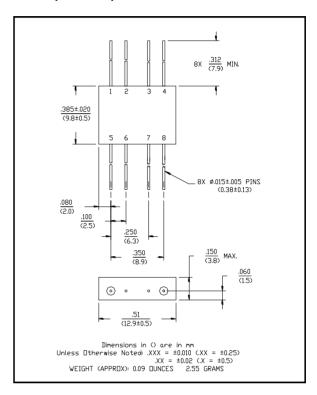
#### **Description**

Ideally suited for Quadrature Combining or performing Summation/Differential Combining.

### SF-1 (JHS-115)



#### FP-2 (JH-115)



#### **Pin Configuration (JH-115)**

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

## Pin Configuration (JHS-115)

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



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

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss <sup>2</sup>	Less Coupling	40 - 80 MHz	dB	_	_	0.5
Isolation	_	40 - 80 MHz	dB	20	_	_
Amplitude Balance	_	40 - 80 MHz	dB	_	_	0.8
VSWR	_	40 - 80 MHz	Ratio	_	_	1.2:1
Deviation from Quadrature	_	40 - 80 MHz	0	_	_	3

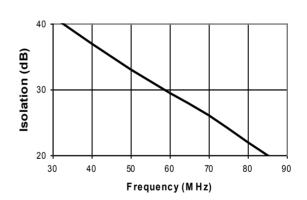
- 1. All specifications apply with 50 ohm source and load impedance.
- 2. Average of coupled output less 3 dB.

### **Phasing Diagram**

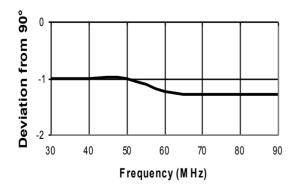
) S	A	В	С	D
А	$\times$	ISO	0°	-90°
В	ISO	$\times$	-90°	0°
С	0°	90°	$\times$	ISO
D	-90°	0°	ISO	$\times$

### **Typical Performance Curves**

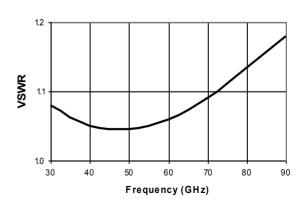
#### Isolation



#### **Deviation from Quadrature**



#### **VSWR**



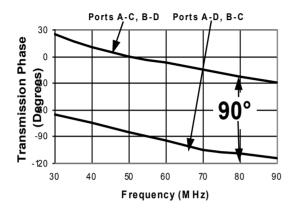


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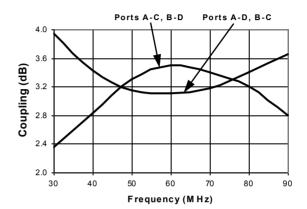
Rev. V3

## **Typical Performance Curves**

#### Transmission Phase



#### Coupling



## **Ordering Information**

Part Number	Package
JH-115 PIN	FP-2
JHS-115 PIN	SF-1

## JH-115 / JHS-115



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