



**Quadrature Hybrid,** 80 - 160 MHz

**JH-/JHS-119** 

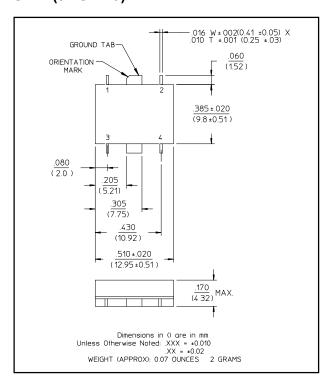
#### **Features**

- Fully Hermetic Package
- Octave Bandwidth
- Low VSWR: 1.3:1
- Impedance: 50 Ohms Nominal
- Input Power: 4 Watts Max.@ 25°C, Derated to 1 Watt @ 85°C
- 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 phase differential and for Quadrature combining or performing summation/differential combining.

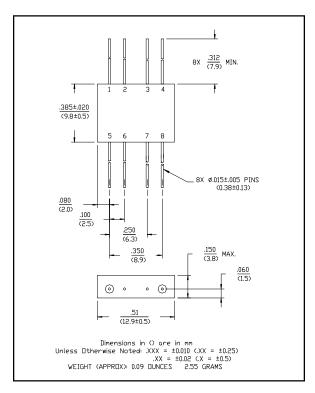
### SF-1 (JHS-119)



# **Pin Configuration (JHS-119)**

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

#### FP-2 (JH-119)



### **Pin Configuration (JH-119)**

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

information.

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JH-/JHS-119 V3

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

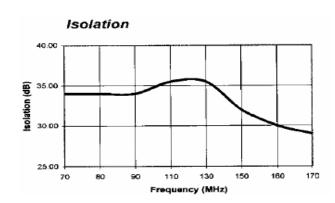
Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss <sup>2</sup>	Less Coupling	80 - 160 MHz	dB	_	_	0.75
Isolation	_	80 - 160 MHz	dB	20	_	_
Amplitude Balance	_	80 - 160 MHz	dB	_	_	1.0
VSWR	_	80 - 160 MHz	Ratio	_	_	1.3:1
Deviation from Quadrature	_	80 - 160 MHz	٥	_	_	3

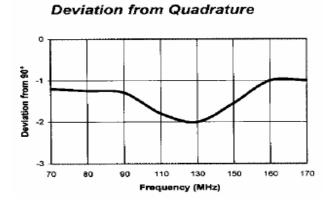
<sup>1.</sup> All specifications apply with 50 ohm source and load impedance.

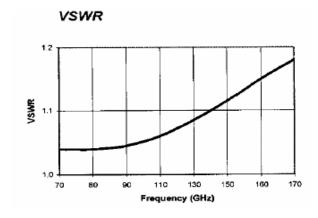
#### **Phasing Diagram**

OUT IN	A	В	С	D
А	$\times$	ISO	0°	-90°
В	ISO	X	-90°	0°
С	0°	90°	$\times$	ISO
D	-90°	0°	ISO	$\times$

## **Typical Performance Curves**







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<sup>2.</sup> Average of coupled output less 3 dB.

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

<sup>2</sup> 

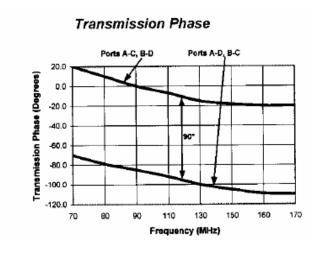


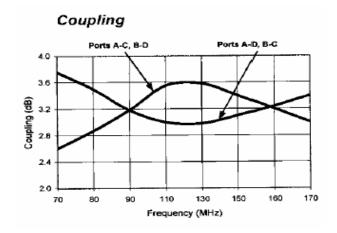


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JH-/JHS-119 V3

## **Typical Performance Curves**





## **Ordering Information**

Part Number	Package
JH-119 PIN	FP-2
JHS-119 PIN	SF-1

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