JH- / JHS-136

Quadrature Hybrid, 175 - 350 MHz

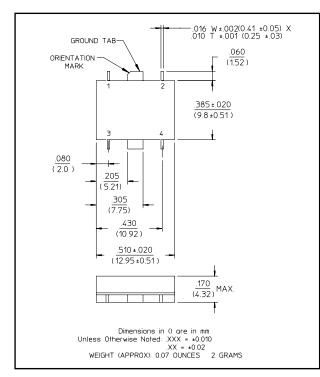


- Fully Hermetic Package
- Octave Bandwidth
- Low VSWR: 1.2:1 Typical
- Impedance: 50 Ohms Nominal
- Input Power: 4 Watts Max.@ 25°C, Derated to 1 Watt @ 85°C
- MIL-STD-202 Screening Available

Description

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

SF-1 (JHS-136)



Pin Configuration (JHS-136)

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

¹

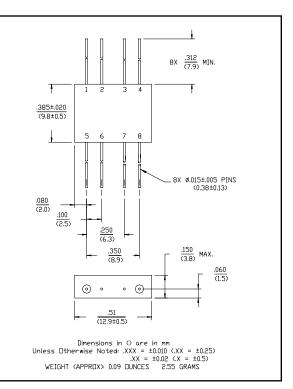
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Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.



Rev. V3

FP-2 (JH-136)



Pin Configuration (JH-136)

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

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Europe Tel: +353.21.244.6400
India Tel: +91.80.4155721
China Tel: +86.21.2407.1588

Visit www.macomtech.com for additional data sheets and product information.

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JH- / JHS-136



Quadrature Hybrid, 175 - 350 MHz

Rev. V3

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

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss ²	Less Coupling	175 - 350 MHz	dB			0.5
Isolation	_	175 - 350 MHz	dB	20	—	—
Amplitude Balance	—	175 - 350 MHz	dB	—	—	0.75
VSWR	_	175 - 350 MHz	Ratio	—	—	1.3:1
Deviation from Quadrature	_	175 - 350 MHz	o		—	4

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

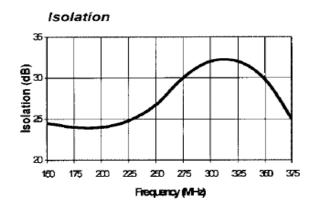
2. Average of coupled output less 3 dB.

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

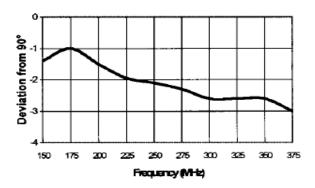
Phasing Diagram

	A	В	С	D
А	\times	ISO	0°	-90°
В	ISO	\times	-90°	0°
С	0°	90°	\times	ISO
D	-90°	0°	ISO	\ge

Typical Performance Curves



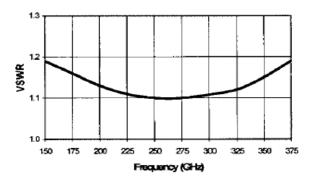
Deviation from Quadrature



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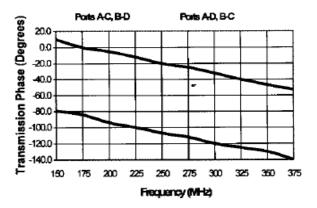
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JH- / JHS-136

Quadrature Hybrid, 175 - 350 MHz

Typical Performance Curves

Transmission Phase



Ordering Information

Part Number	Package
JH-136 PIN	FP-2
JHS-136 PIN	SF-1



Rev. V3

Ports A-C, B-D Ports A-D, B-C 4.4 4.0 Coupling (dB) 3.6 3.2 2.8 2.4 20 175 275 300 325 350 375 150 200 250 225 Frequency (MHz)

Coupling

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