

Quadrature Hybrid, 250 - 500 MHz

Rev. V3

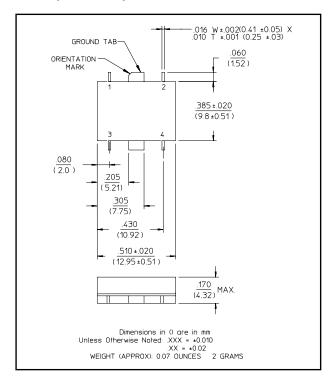
Features

- Octave Bandwidth
- Low VSWR: 1.1:1 Typical
- High Isolation: 30 dB 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 phase differential and for Quadrature or performing summation/differential combining combining.

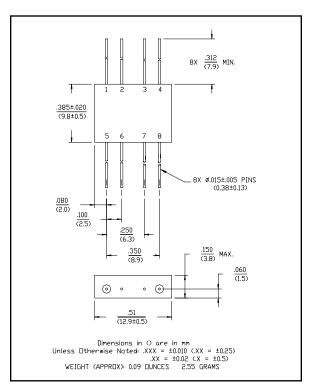
SF-1 (JHS-139)



Pin Configuration (JHS-139)

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

FP-2 (JH-139)



Pin Configuration (JH-139)

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

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed. PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology

• North America Tel: 800.366.2266 • 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.



Quadrature Hybrid, 250 - 500 MHz

Rev. V3

Electrical Specifications¹: $T_A = -55$ °C to +85°C

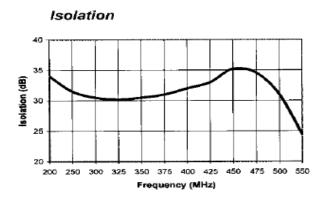
Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss ²	Less Coupling	250 - 500 MHz	dB	_	_	0.5
Isolation	_	250 - 500 MHz	dB	15	_	_
Amplitude Balance	_	250 - 500 MHz	dB	_	_	1.0
VSWR	_	250 - 500 MHz	Ratio	_	_	1.5:1
Deviation from Quadrature	_	250 - 500 MHz	0	_	_	4

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

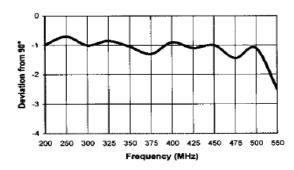
Phasing Diagram

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

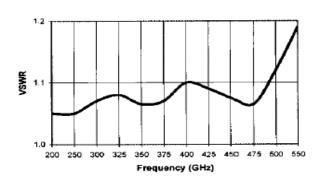
Typical Performance Curves



Deviation from Quadrature



VSWR



Commitment to produce in volume is not guaranteed.

^{2.} Average of coupled output less 3 dB.

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

[•] India Tel: +91.80.4155721 • China Tel: +86.21.2407.1588

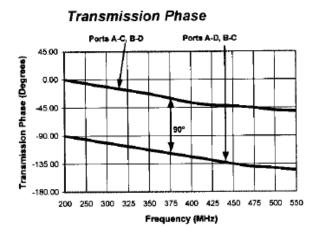
Visit www.macomtech.com for additional data sheets and product information.

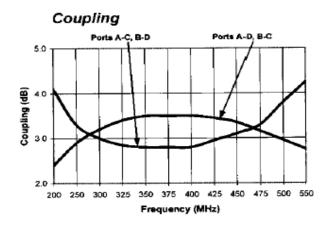


Quadrature Hybrid, 250 - 500 MHz

Rev. V3

Typical Performance Curves





Ordering Information

Part Number	Package
JH-139 PIN	FP-2
JHS-139 PIN	SF-1

Commitment to produce in volume is not guaranteed.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

MACOM:

JH-139-PIN JHS-139-PIN