JH- / JHS-113

Quadrature Hybrid, 7 - 14 MHz

Rev. V3

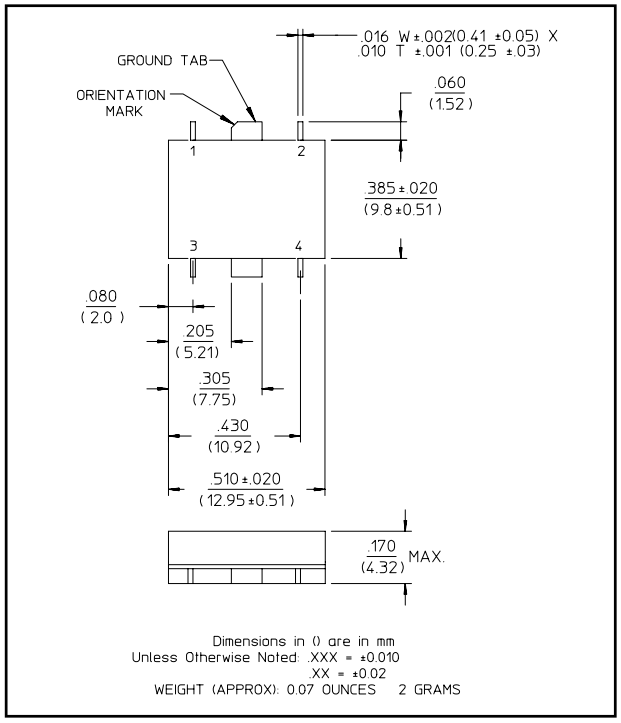
Features

- Octave Bandwidth
- Low VSWR: 1.2:1
- Low Loss: 0.5 dB Max.
- Impedance: 50 Ohms Nominal
- Input Power: 4 Watts Max.@ 25°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.

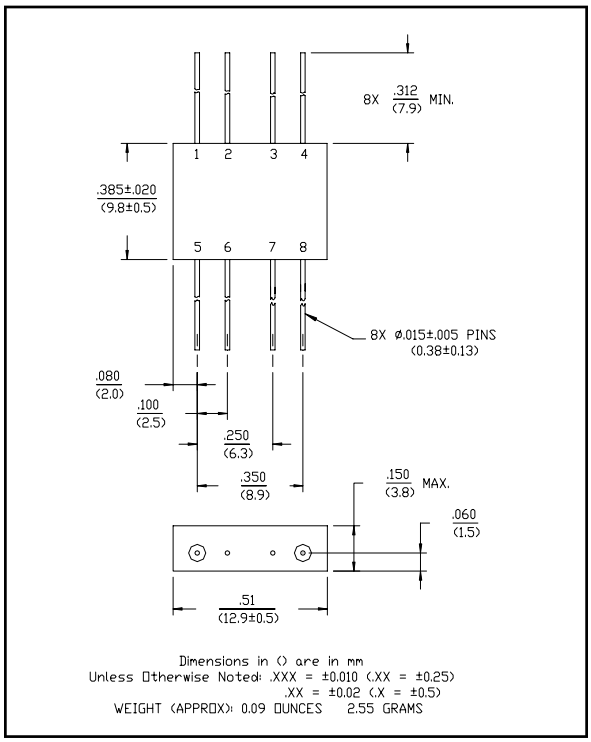
SF-1 (JHS-113)



Pin Configuration (JHS-113)

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

FP-2 (JH-113)



Pin Configuration (JH-113)

Pin No.	Function	Pin No.	Function
1	A	5	D
2	GND	6	GND
3	GND	7	GND
4	B	8	C

• **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.

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Electrical Specifications[1]: T_A = -55°C to +85°C

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss [2]	Less Coupling	7 - 14 MHz	dB	—	—	0.5
Isolation	—	7 - 14 MHz	dB	20	—	—
Amplitude Balance	—	7 - 14 MHz	dB	—	—	0.75
VSWR	—	7 - 14 MHz	Ratio	—	—	1.2:1
Deviation from Quadrature	—	7 - 14 MHz	°	—	—	3

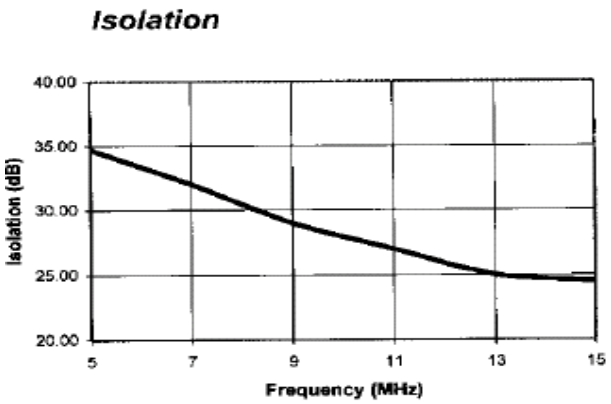
1. All specifications apply with 50 ohm source and load impedance.
2. Average of coupled output less 3 dB.

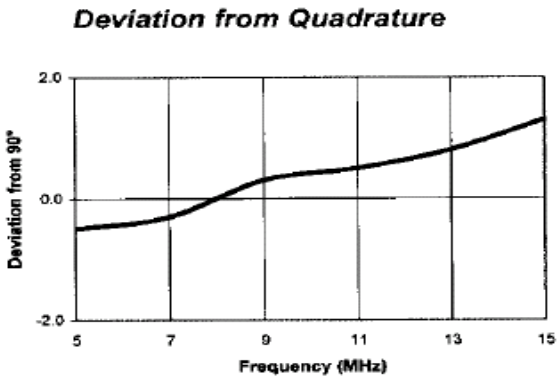
Phasing Diagram

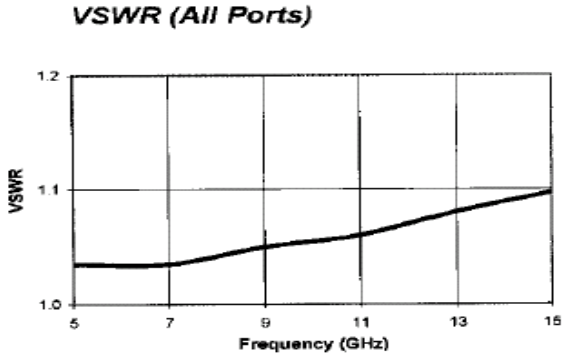
OUT / IN	A	B	C	D
A		ISO	0°	-90°
B	ISO		-90°	0°
C	0°	90°		ISO
D	-90°	0°	ISO	

All other pins and case are ground.

Typical Performance Curves







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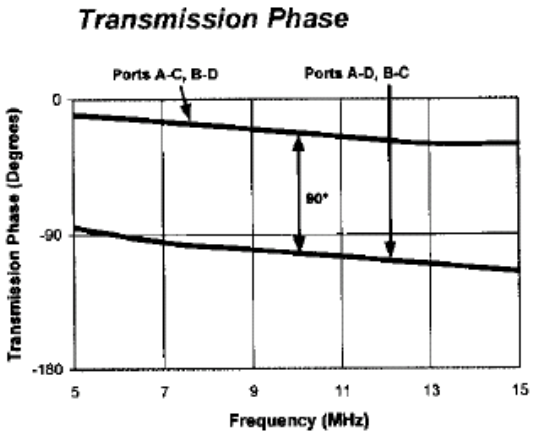

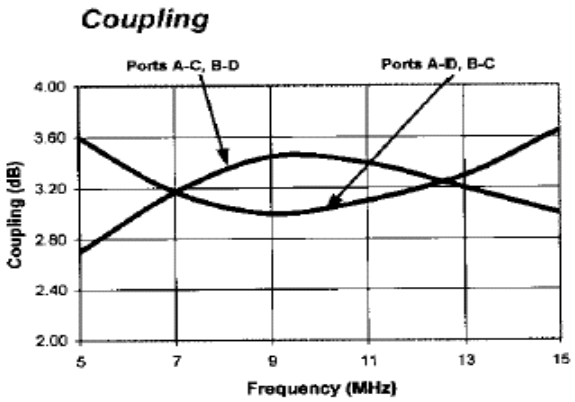

Ordering Information

Part Number	Package
JH-113 PIN	FP-2
JHS-113 PIN	SF-1

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