

Quadrature Hybrid, 7 - 14 MHz

Rev. V3

Features

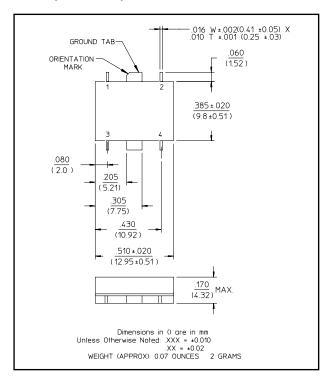
Octave Bandwidth Low VSWR: 1.2:1 Low Loss: 0.5 dB Max.

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 phase differential and for Quadrature combining or performing summation/differential combining.

SF-1 (JHS-113)

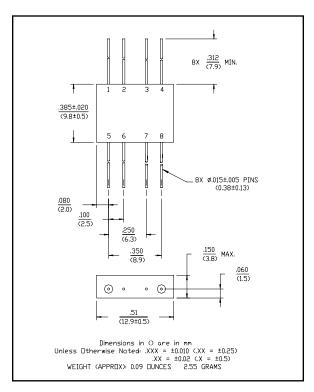


Pin Configuration (JHS-113)

Commitment to produce in volume is not guaranteed.

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

FP-2 (JH-113)



Pin Configuration (JH-113)

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

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

Parameter	Test Conditions	Frequency	Units	Min	Тур	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	٥	_	_	3

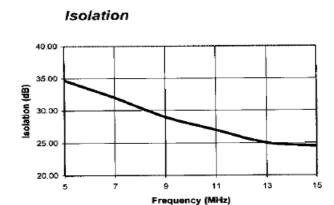
- 1. All specifications apply with 50 ohm source and load impedance.
- 2. Average of coupled output less 3 dB.

Phasing Diagram

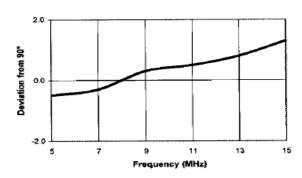
OUT N	A	В	С	D
А	\times	ISO	0°	-90°
В	ISO	\times	-90°	0°
С	0°	90°	\times	ISO
D	-90°	0°	ISO	\times

All other pins and case are ground.

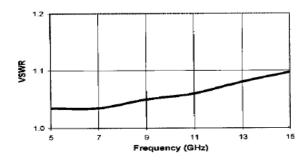
Typical Performance Curves



Deviation from Quadrature



VSWR (All Ports)



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JH-/JHS-113

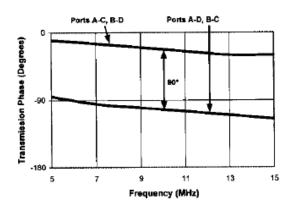


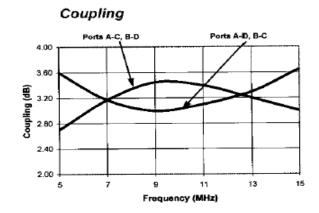
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Typical Performance Curves

Transmission Phase





Ordering Information

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

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