

Surface Mount Quadrature Hybrid, 40 - 80 MHz

Rev. V3

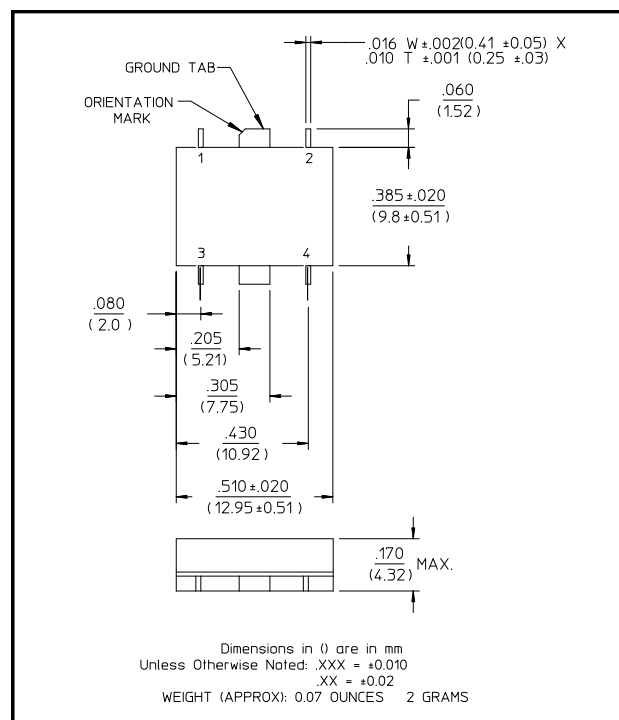
Features

- Fully Hermetic Package
- 3° Maximum Phase Deviation from 90°
- Low Loss: 0.5 dB Max.
- Impedance: 50 Ohms Nominal
- Input Power: Watts Max. Derated to 1 Watt @ 100°C
- Typical Phase Linearity: 3° from Straight Line
- MIL-STD-202 Screening Available

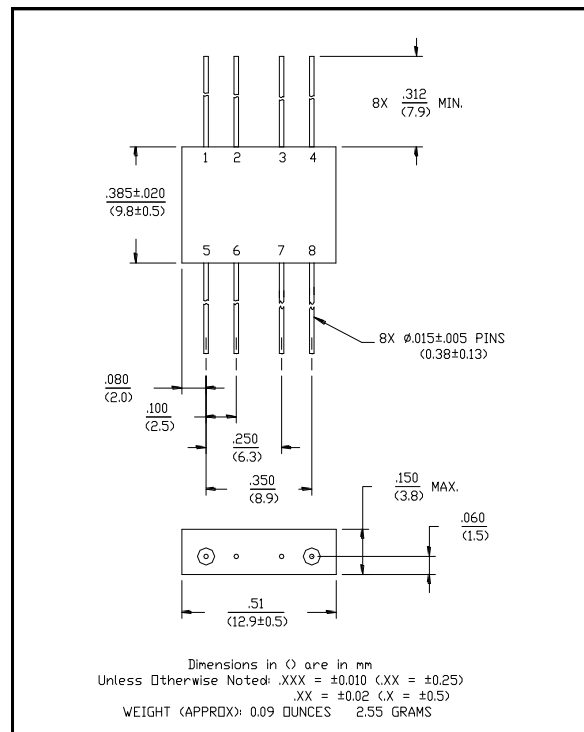
Description

Ideally suited for Quadrature Combining or performing Summation/Differential Combining.

SF-1 (JHS-115)



FP-2 (JH-115)



Pin Configuration (JH-115)

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

Pin Configuration (JHS-115)

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

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

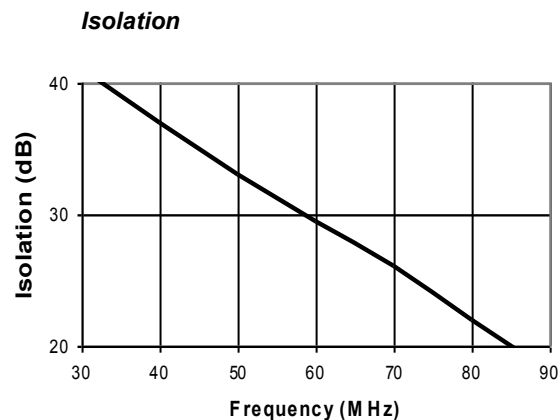
Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss ²	Less Coupling	40 - 80 MHz	dB	—	—	0.5
Isolation	—	40 - 80 MHz	dB	20	—	—
Amplitude Balance	—	40 - 80 MHz	dB	—	—	0.8
VSWR	—	40 - 80 MHz	Ratio	—	—	1.2:1
Deviation from Quadrature	—	40 - 80 MHz	°	—	—	3

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

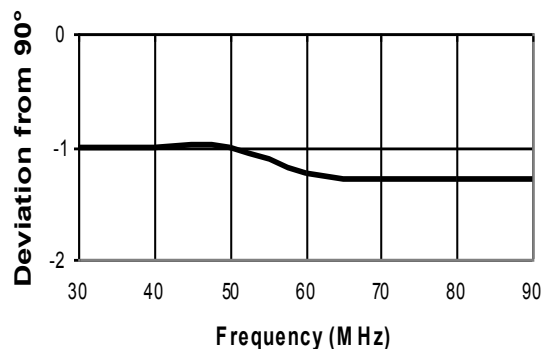
Phasing Diagram

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

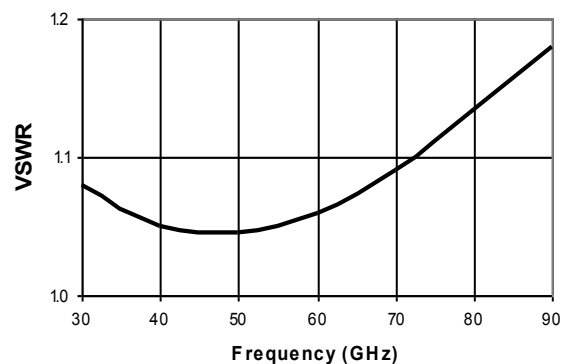
Typical Performance Curves



Deviation from Quadrature

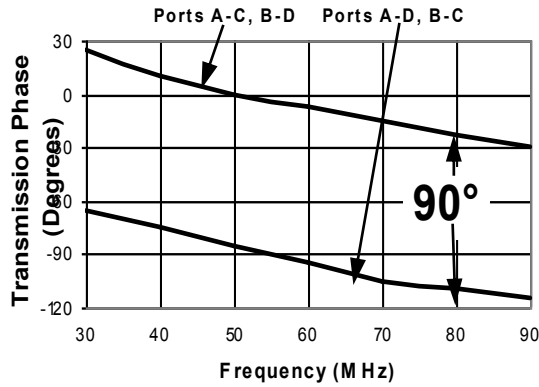


VSWR

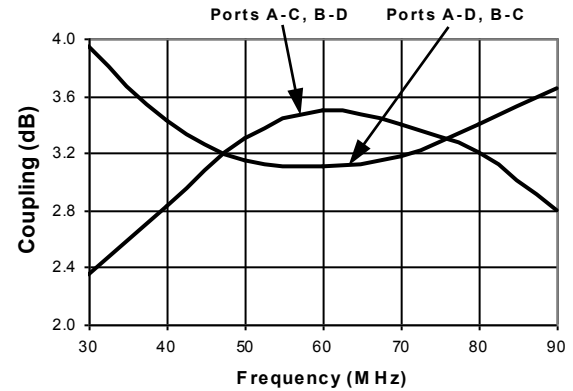


Typical Performance Curves

Transmission Phase



Coupling



Ordering Information

Part Number	Package
JH-115 PIN	FP-2
JHS-115 PIN	SF-1

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