



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Surface Mount Quadrature Hybrid, 40 - 80 MHz

Rev. V3

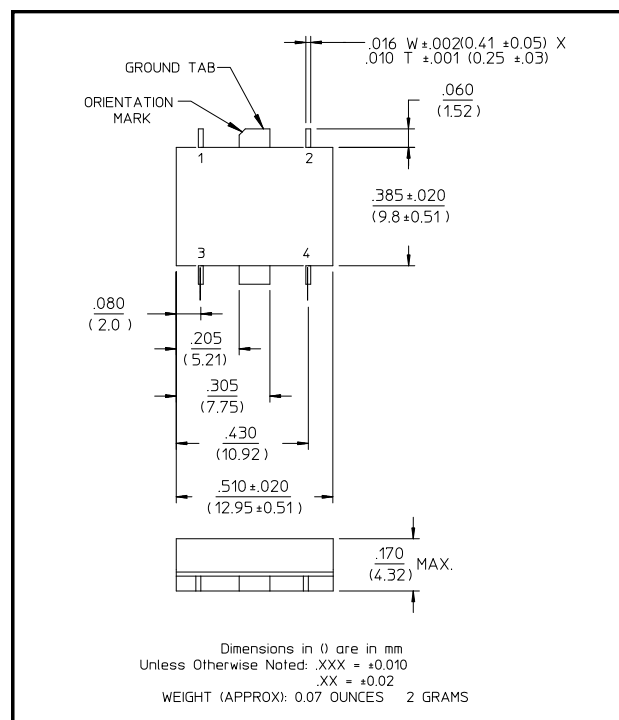
Features

- 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

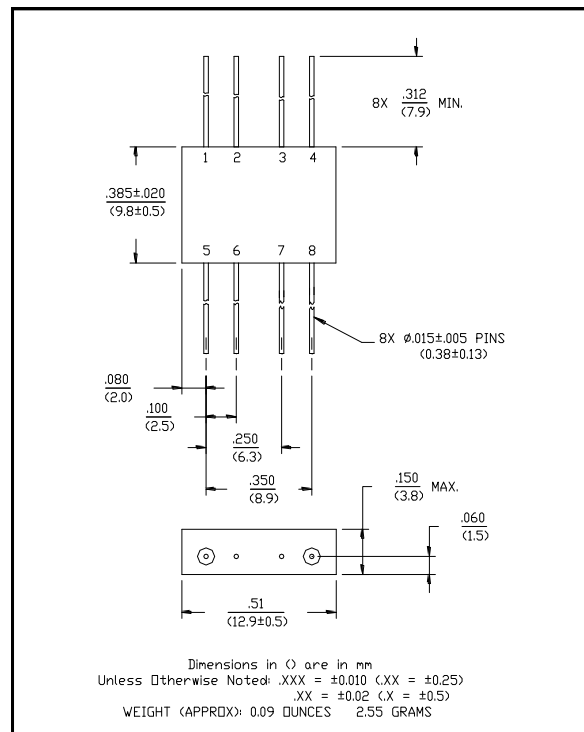
Description

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 $+85^{\circ}\text{C}$

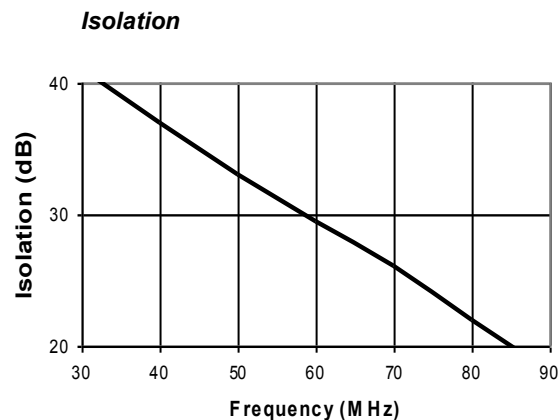
Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss ²	Less Coupling	40 - 80 MHz	dB	—	—	0.5
Isolation	—	40 - 80 MHz	dB	20	—	—
Amplitude Balance	—	40 - 80 MHz	dB	—	—	0.8
VSWR	—	40 - 80 MHz	Ratio	—	—	1.2:1
Deviation from Quadrature	—	40 - 80 MHz	$^{\circ}$	—	—	3

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

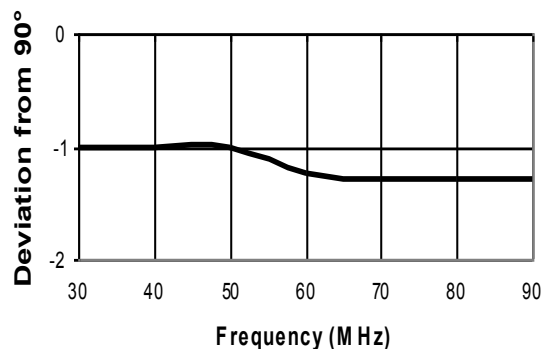
Phasing Diagram

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

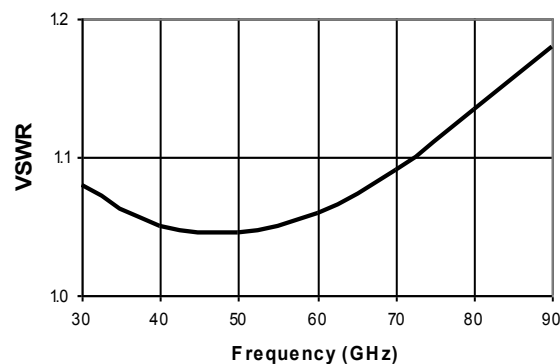
Typical Performance Curves



Deviation from Quadrature

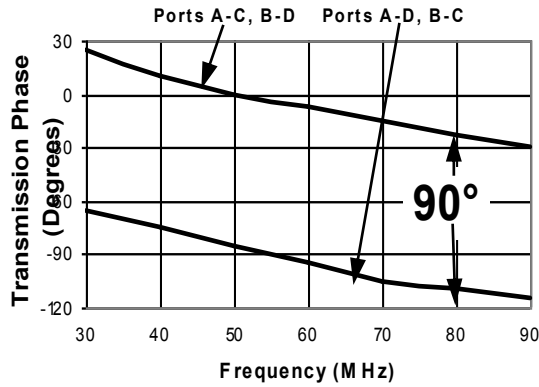


VSWR

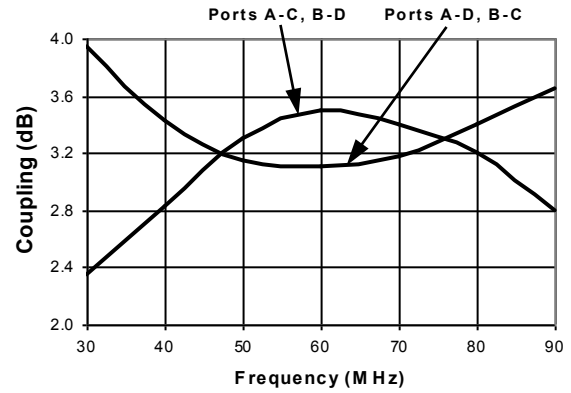


Typical Performance Curves

Transmission Phase



Coupling



Ordering Information

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

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