

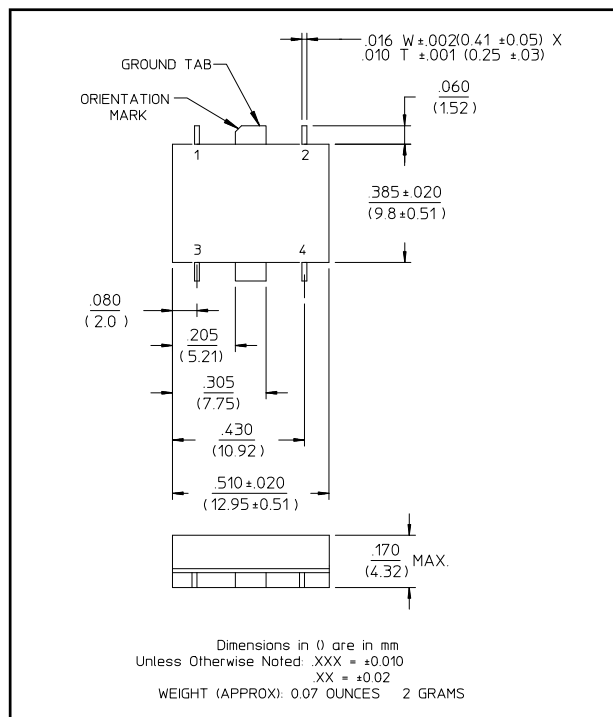
Features

- 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.

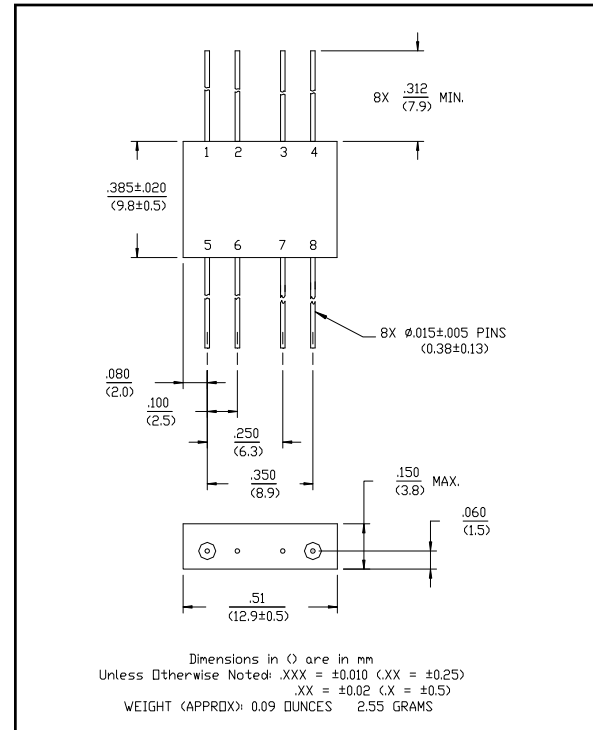
SF-1 (JHS-115)



Pin Configuration (JHS-115)

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

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 |

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

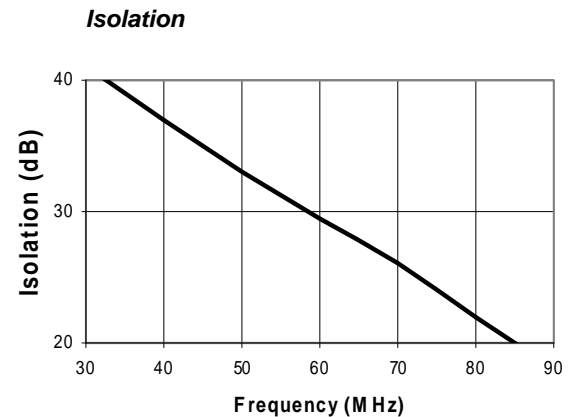
| Parameter | Test Conditions | Frequency | Units | Min | Typ | Max |
|-----------------------------|-----------------|-------------|-------|-----|-----|-------|
| Insertion Loss ² | Less Coupling | 40 - 80 MHz | dB | — | — | 0.5 |
| Isolation | — | 40 - 80 MHz | dB | 20 | — | — |
| Amplitude Balance | — | 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.

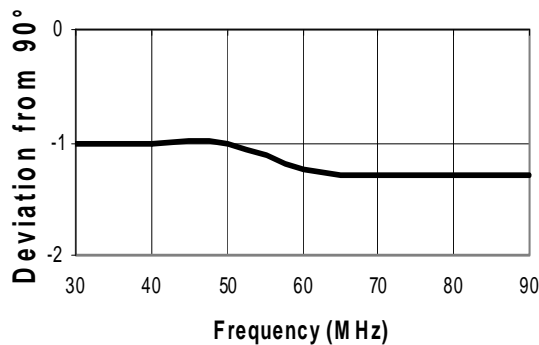
Phasing Diagram

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

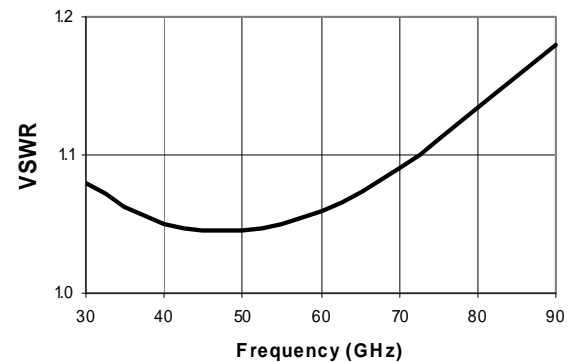
Typical Performance Curves



Deviation from Quadrature

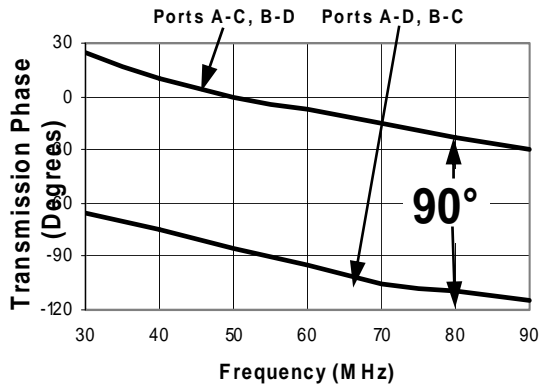


VSWR

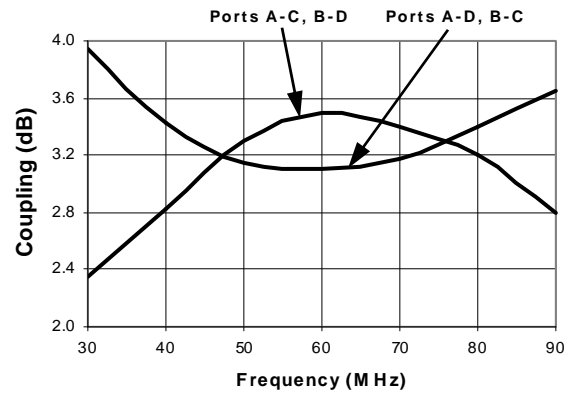


Typical Performance Curves

Transmission Phase



Coupling



Ordering Information

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