

Electronics

High Frequency Quadrature Hybrid, 1 - 2 GHz

Features

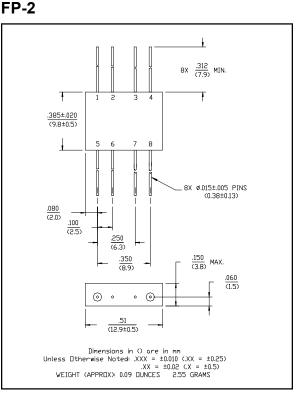
- Octave Bandwidth
- Low VSWR: 1.25:1 Typical
- Miniature Size: 1/2" x 3/8" Flatpack
- Impedance: 50 Ohms Nominal
- Input Power: 25 Watts Max @ +25°C, Derated to 1 Watt @ +85°C
- MIL-STD-202 Screening Available

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.

Phasing Diagram

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



Pin Configuration

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

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

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss ²	Less Coupling	1- 2 GHz	dB	—	—	0.3
Isolation	—	1- 2 GHz	dB	18	—	—
Amplitude Balance	—	1- 2 GHz	dB	—	—	1.0
VSWR	—	1- 2 GHz	Ratio	—	—	1.5:1
Deviation from Quadrature	_	1- 2 GHz	o	—	_	5

1. All specifications apply with 50 ohm source and load impedance.

2. Average of coupled output less 3 dB.

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This product contains elements protected by United States Patent Number 3,484,724.

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JH-141

V3

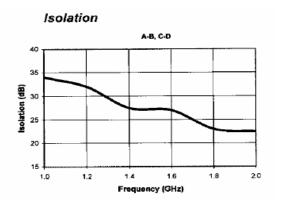


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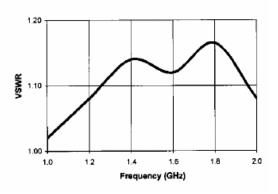
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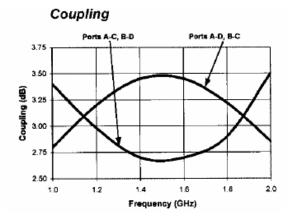
High Frequency Quadrature Hybrid, 1 - 2 GHz JH-141 V3

Typical Performance Curves



VSWR

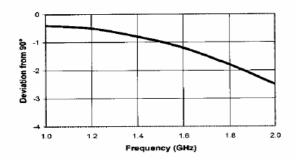


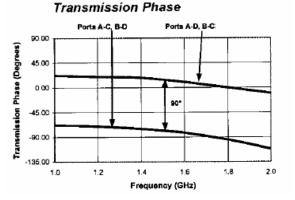


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Deviation from Quadrature





Ordering Information

Part Number	Package
JH-141 PIN	FP-2

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