

Electronics

Surface Mount Quadrature Hybrid, 200 - 400 MHz

Features

- Fully Hermetic
- Octave Bandwidth
- Low VSWR: 1.1:1 Typical
- Impedance: 50 Ohms Nominal
- Input Power: 5 Watts Max @ +25°C, Derated to 1 Watt @ +85°C
- Typical Phase Linearity: 3° from straight line
- 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	0°	-90°
С	-90°	0°	\times	ISO
D	0°	-90°	ISO	\times

016 W : 002(0.41 +0.05) × 010 T : 001 (0.25 ±.03) GROUND TAB (152) ORIENTATION MARK 3B5 x.020 (9.8±0.51) .<u>080</u> (2.0 205 (521) 305 430 (10.92) 510+020 (12.95:0.51) 170 MAX 14 32

Differences in 0 one in me Unless Otherwise Noted XXX - 40.010 XX - 40.02 WEIGHT (APPROXI 0.07 CUNCES 2 GRAMS)

Pin Configuration

SF-1

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

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

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss ²	Less Coupling	200– 400 MHz	dB	—	—	0.5
Isolation	—	200– 400 MHz	dB	18	—	—
Amplitude Balance	—	200– 400 MHz	dB	—	—	1.0
VSWR	—	200– 400 MHz	Ratio	—	—	1.3:1
Deviation from Quadrature	_	200– 400 MHz	0	—	_	4

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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JHS-142

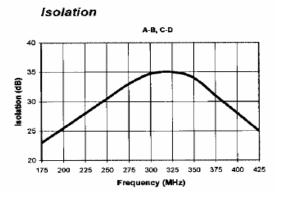
V3



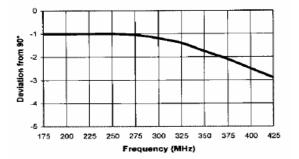
Surface Mount Quadrature Hybrid, 200 - 400 MHz



Typical Performance Curves

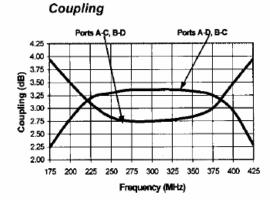


Deviation from Quadrature



Ordering Information

Part Number	Package		
JHS-142 PIN	SF-1		



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