JH-119 / JHS-119

Quadrature Hybrid, 80 - 160 MHz

Rev. V3

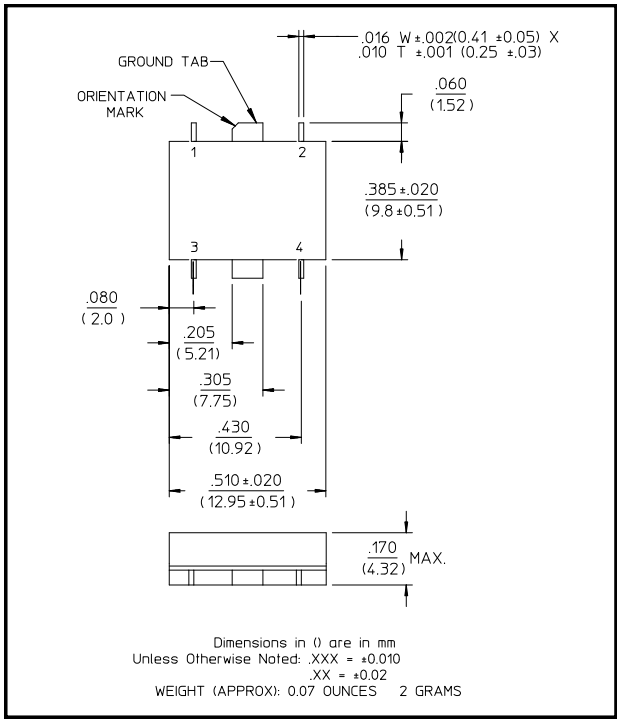
Features

- Fully Hermetic Package
- Octave Bandwidth
- Low VSWR: 1.3:1
- Impedance: 50 Ohms Nominal
- Input Power: 4 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.

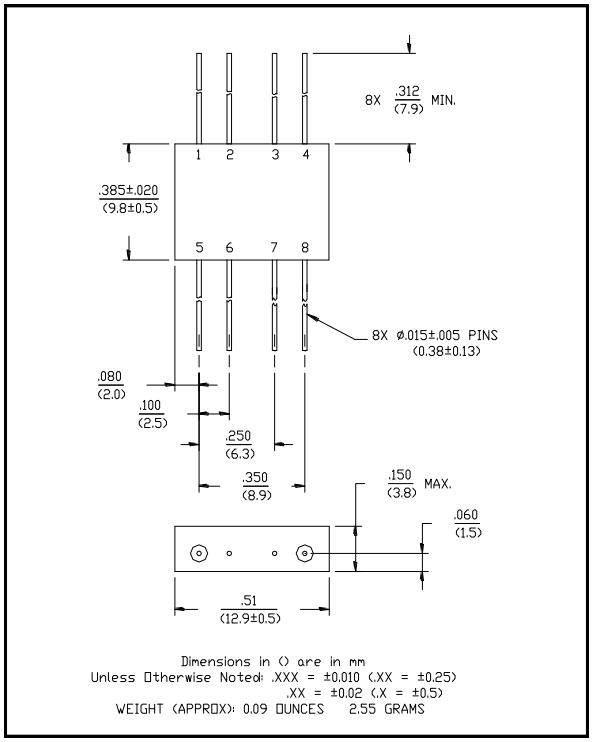
SF-1 (JHS-119)



Pin Configuration (JHS-119)

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

FP-2 (JH-119)



Pin Configuration (JH-119)

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

M/A-COM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.
Visit www.macom.com for additional data sheets and product information.

For further information and support please visit:
https://www.macom.com/support

Electrical Specifications[1]: T_A = -55°C to +85°C

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss [2]	Less Coupling	80 - 160 MHz	dB	—	—	0.75
Isolation	—	80 - 160 MHz	dB	20	—	—
Amplitude Balance	—	80 - 160 MHz	dB	—	—	1.0
VSWR	—	80 - 160 MHz	Ratio	—	—	1.3:1
Deviation from Quadrature	—	80 - 160 MHz	°	—	—	3

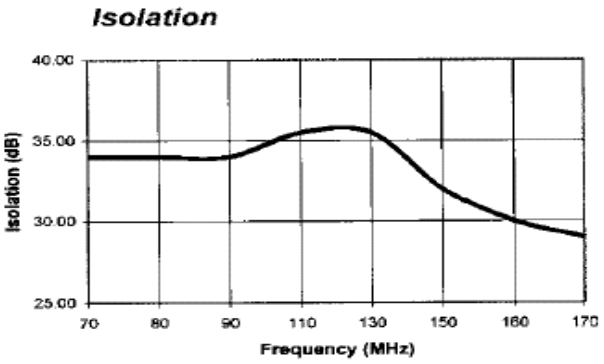
1. All specifications apply with 50 ohm source and load impedance.
2. Average of coupled output less 3 dB.

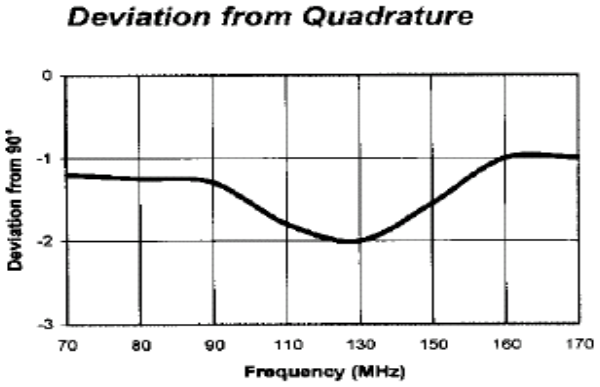
This product contains elements protected by United States Patent Number 3,484,724

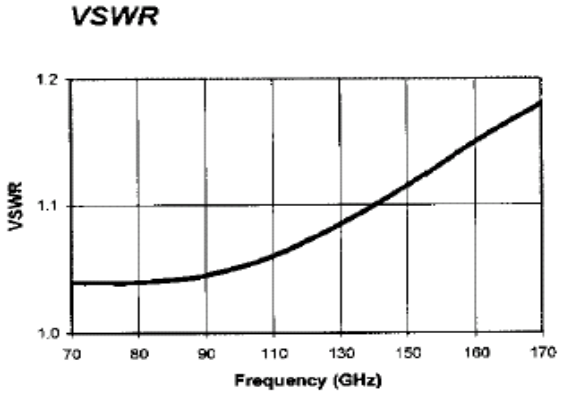
Phasing Diagram

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



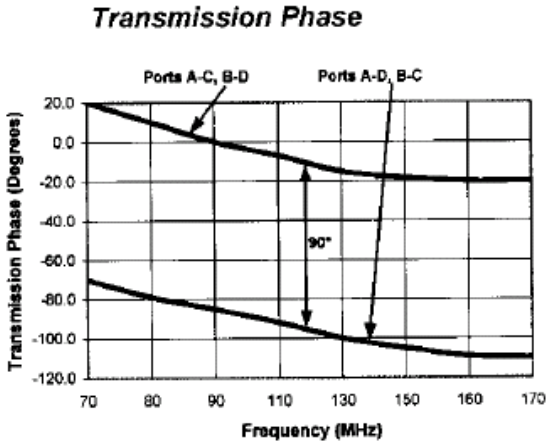


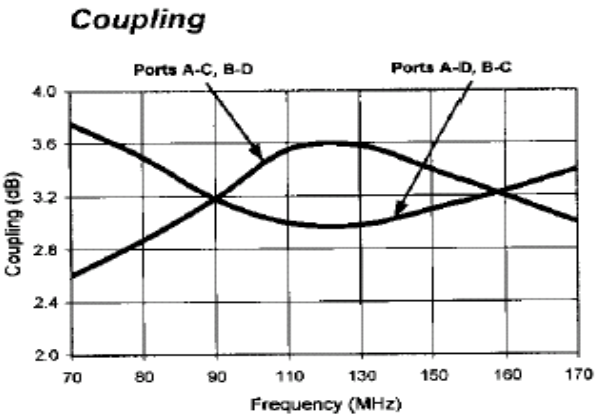


M/A-COM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.
Visit www.macom.com for additional data sheets and product information.

For further information and support please visit:
https://www.macom.com/support

Typical Performance Curves





Ordering Information

Part Number	Package
JH-119 PIN	FP-2
JHS-119 PIN	SF-1

M/A-COM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.
Visit www.macom.com for additional data sheets and product information.

For further information and support please visit:
https://www.macom.com/support

M/A-COM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with M/A-COM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppels or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.