

SMA 90 Degree Hybrid Coupler From 4 GHz to 26.5 GHz Rated To 20 Watts

The SH7226 is a 90 degree hybrid coupler that operates from 4 to 26.5 GHz and can handle up to 20 Watts (CW) with 15 dB isolation minimum and 1.75:1 VSWR maximum. The package interface uses SMA female connectors, and is also REACH and RoHS compliant.

The SH7226 is part of Fairview Microwave's family of 90 degree hybrid couplers that offer excellent performance featuring high isolation, low insertion loss and VSWR while maintaining great amplitude/phase balance over the entire operating frequency range. They are available in both narrow and broad bandwidths and can be used in a wide variety of applications including signal sampling, phased array radar, and any application that requires even power distribution with a 90 degree difference in phase.



Features:

- 90° Hybrid Coupler
- 4 to 26.5 GHz Frequency Range
- Isolation > 15 dB
- VSWR < 1.75:1
- Max Power 20 Watt (CW)

Applications:

- Test and Measurement
- Military Communications
- Commercial Communications
- Wireless Communications
- SATCOM

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	4		26.5	GHz
Impedance		50		Ohms
Phase Difference		90		Degrees
Isolation	15			dB
VSWR			1.75:1	
Amplitude Balance		3		dB
Phase Balance		8		Degrees
Input Power (CW)			20	Watts

Mechanical Specifications

Size	
Length	1.7 in [43.18 mm]
Width	0.85 in [21.59 mm]
Height	0.4 in [10.16 mm]
Weight	0.078 lbs [35.38 g]
Configuration	
RF Connector Type	SMA Female

Environmental Specifications

Temperature	
Operating Range	-25 to +80 deg C
Storage Range	-55 to +150 deg C
Humidity	MIL-STD-202, Method 106 (90% relative humidity, +65°C)
Shock	MIL-STD-202, Method 213/I (100 G's, 6 ms)
Vibration	MIL-STD-202, Method 204/D (10 to 2,000 Hz, 20 G's, 12 hours)
Altitude	MIL-STD-202, Method 105/E (150,000 feet)

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Compliance Certifications (visit www.FairviewMicrowave.com for current document)

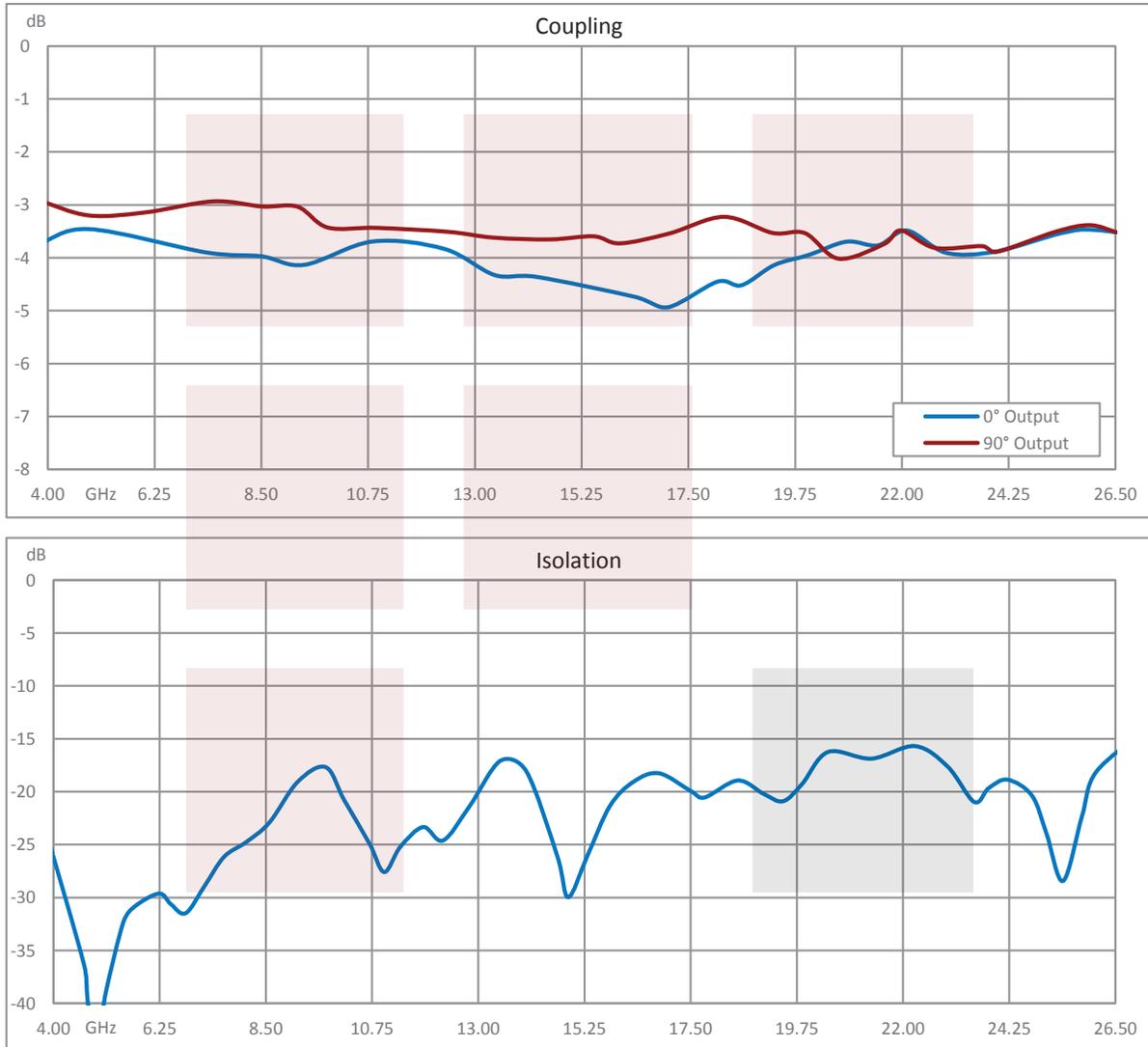
RoHS Compliant
 REACH Compliant

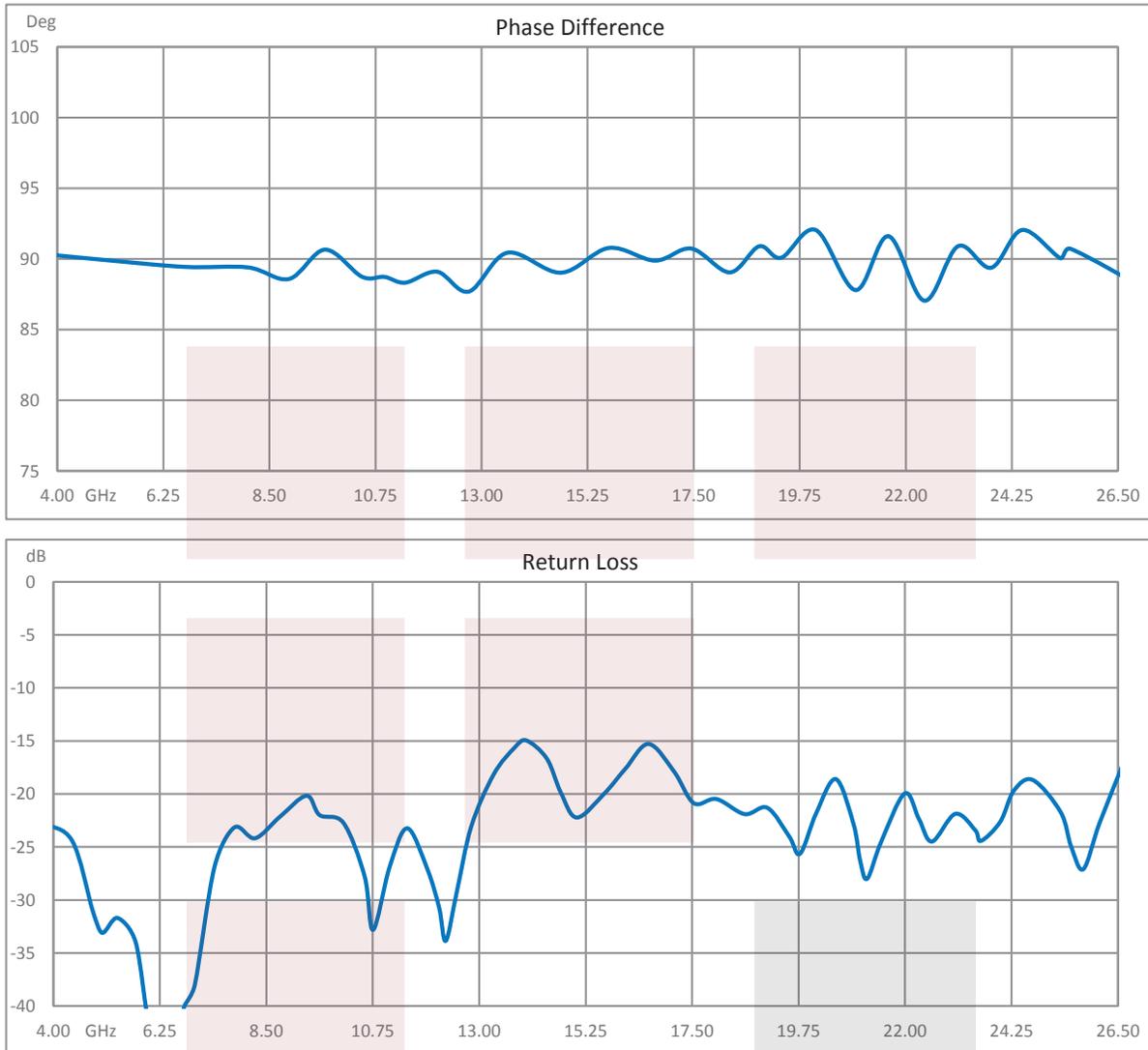
12/17/2015

Plotted and Other Data

Notes:

Typical Performance Data



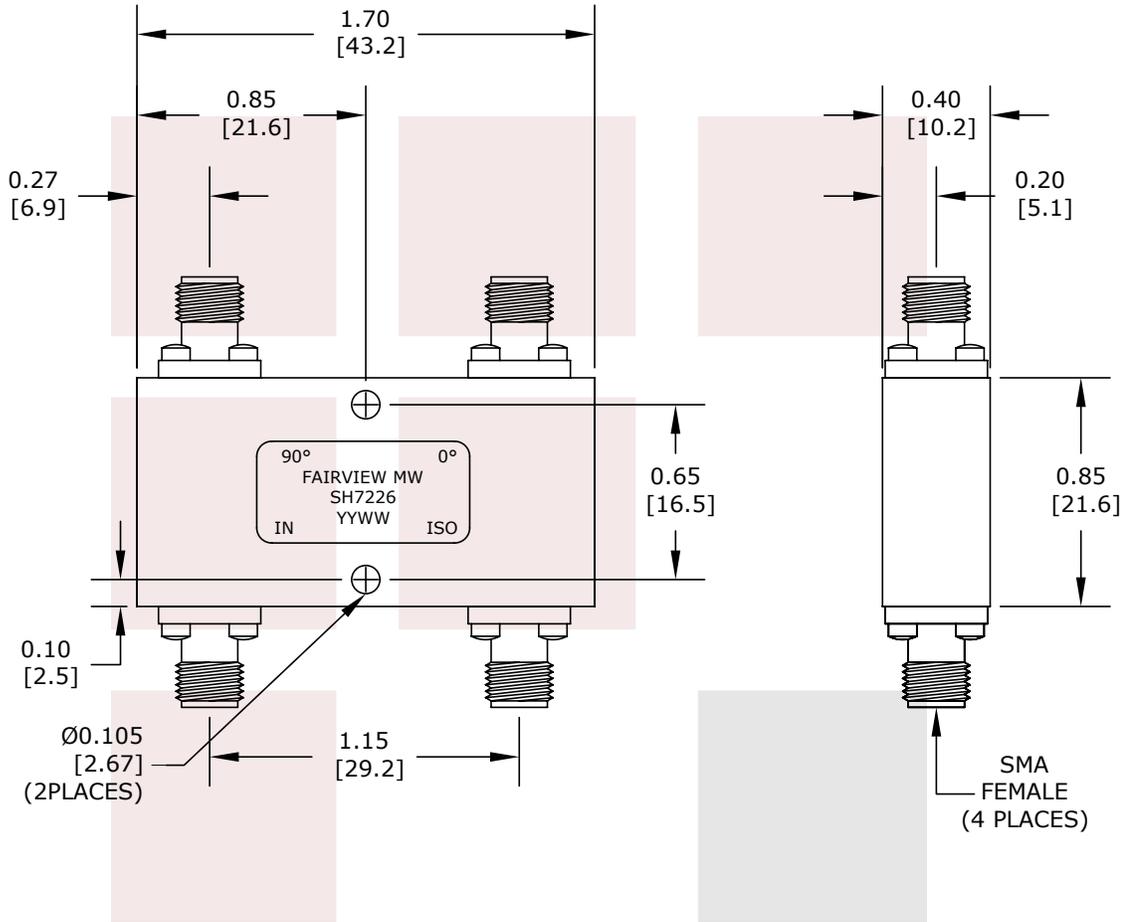


SMA 90 Degree Hybrid Coupler From 4 GHz to 26.5 GHz Rated To 20 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA 90 Degree Hybrid Coupler From 4 GHz to 26.5 GHz Rated To 20 Watts SH7226](#)

URL: <https://www.fairviewmicrowave.com/sma-90-degree-hybrid-coupler-4-26.5-ghz-20-watts-sh7226-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



STANDARD TOLERANCES	
.XX	±0.02
.XXX	±0.010

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
TITLE SMA 90 Degree Hybrid Coupler From 4 GHz to 26.5 GHz Rated To 20 Watts		DWG NO SH7226		CAGE CODE 3FKR5	
CAD FILE	041316	SHEET	SCALE	N/A	SIZE A 3045