

**SMA 90 Degree Hybrid Coupler From 500 MHz to 1,000 MHz Rated To 50 Watts**

The SH7211 is a 90 degree hybrid coupler that operates from 500 to 1,000 MHz and can handle up to 50 Watts (CW) with 22 dB isolation minimum and 1.2:1 VSWR maximum. The package interface uses SMA female connectors, and is RoHS compliant.

The SH7211 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.

**Electrical Specifications**

Description	Min	Typ	Max	Units
Frequency Range	500		1,000	MHz
Impedance		50		Ohms
Phase Difference		90		Degrees
Coupling		3.1		dB
Insertion Loss		0.3	0.8	dB
Isolation	22			dB
VSWR			1.2:1	
Phase Balance		2		Degrees
Input Power (CW)			50	Watts

**Mechanical Specifications**

**Size**

Length	3.33 in [84.58 mm]
Width	0.51 in [12.95 mm]
Height	0.43 in [10.92 mm]
Weight	0.096 lbs [43.54 g]

**Configuration**

RF Connector Type	SMA Female
Contact Material and Plating	Beryllium Copper, Gold

**Environmental Specifications**

**Temperature**

Operating Range	-55 to +85 deg C
Storage Range	-55 to +100 deg C

**Compliance Certifications** (visit [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com) for current document)

RoHS Compliant

**Plotted and Other Data**

Notes:



**Features:**

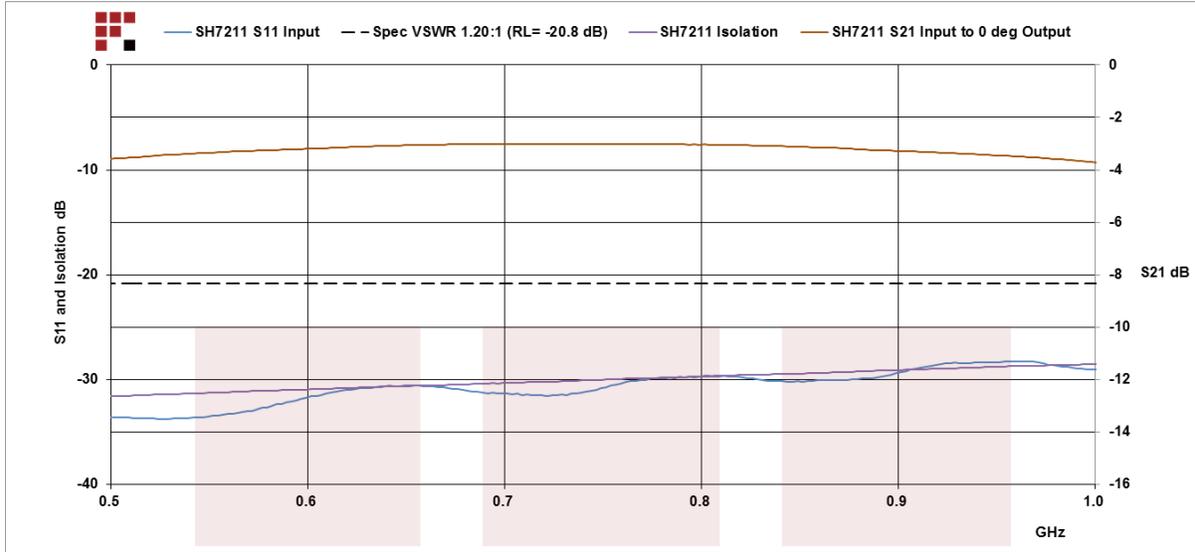
- 90° Hybrid Coupler
- 500 to 1,000 MHz Frequency Range
- Isolation > 22 dB
- VSWR < 1.2:1
- Max Power 50 Watt (CW)

**Applications:**

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

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**Typical Performance Data**

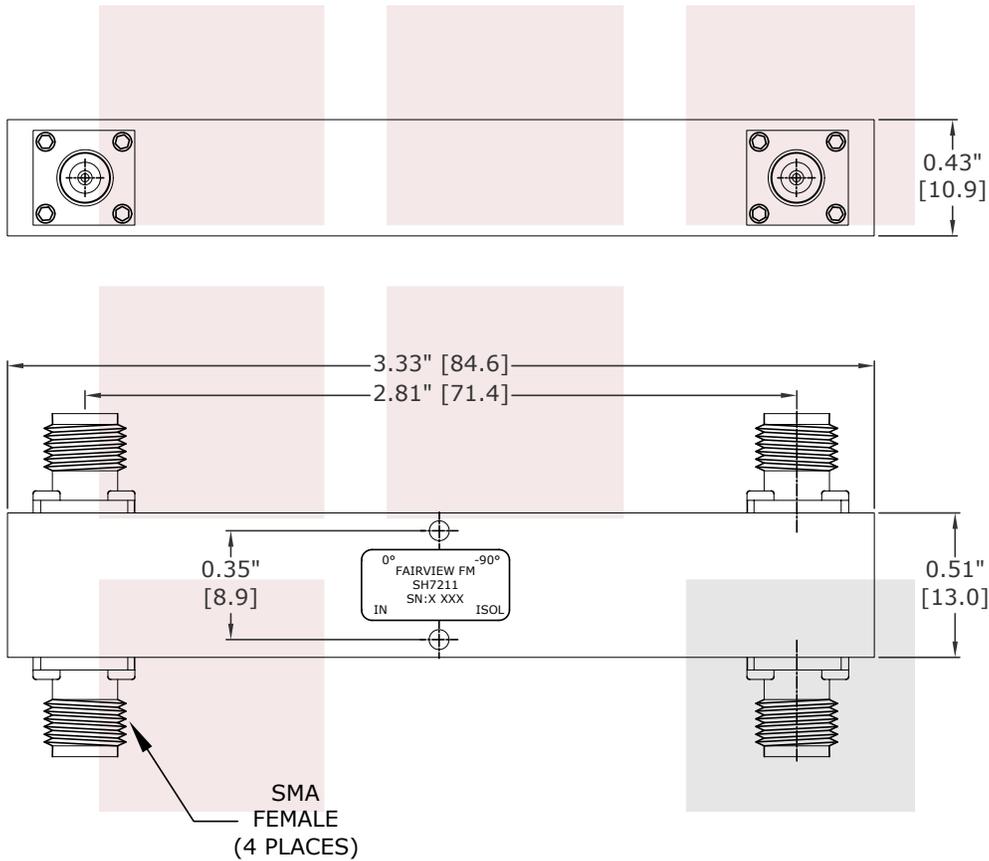


SMA 90 Degree Hybrid Coupler From 500 MHz to 1,000 MHz Rated To 50 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA 90 Degree Hybrid Coupler From 500 MHz to 1,000 MHz Rated To 50 Watts SH7211](#)

URL: <http://www.fairviewmicrowave.com/sma-90-degree-hybrid-coupler-500-1000-mhz-50-watts-sh7211-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	
.X	±0.2
.XX	±0.1
.XXX	±0.05

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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TITLE SMA 90 Degree Hybrid Coupler From 500 MHz to 1,000 MHz Rated To 50 Watts	DWG NO <b>SH7211</b>	CAGE CODE <b>3FKR5</b>			
CAD FILE 041316	SHEET	SCALE N/A	SIZE A	3045	