

**SMA 90 Degree Hybrid Coupler From 1 GHz to 2 GHz  
 Rated To 50 Watts**

The SH7213 is a 90 degree hybrid coupler that operates from 1 to 2 GHz and can handle up to 50 Watts (CW) with 22 dB isolation minimum and 1.3:1 VSWR maximum. The package interface uses SMA female connectors, and is RoHS compliant.

The SH7213 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	1		2	GHz
Impedance		50		Ohms
Phase Difference		90		Degrees
Coupling		3.1		dB
Isolation	22			dB
VSWR			1.3:1	
Phase Balance		2		Degrees
Input Power (CW)			50	Watts

**Mechanical Specifications**

<b>Size</b>	
Length	1.98 in [50.29 mm]
Width	0.51 in [12.95 mm]
Height	0.43 in [10.92 mm]
Weight	0.067 lbs [30.39 g]

<b>Configuration</b>	
RF Connector Type	SMA Female

**Environmental Specifications**

<b>Temperature</b>	
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:**

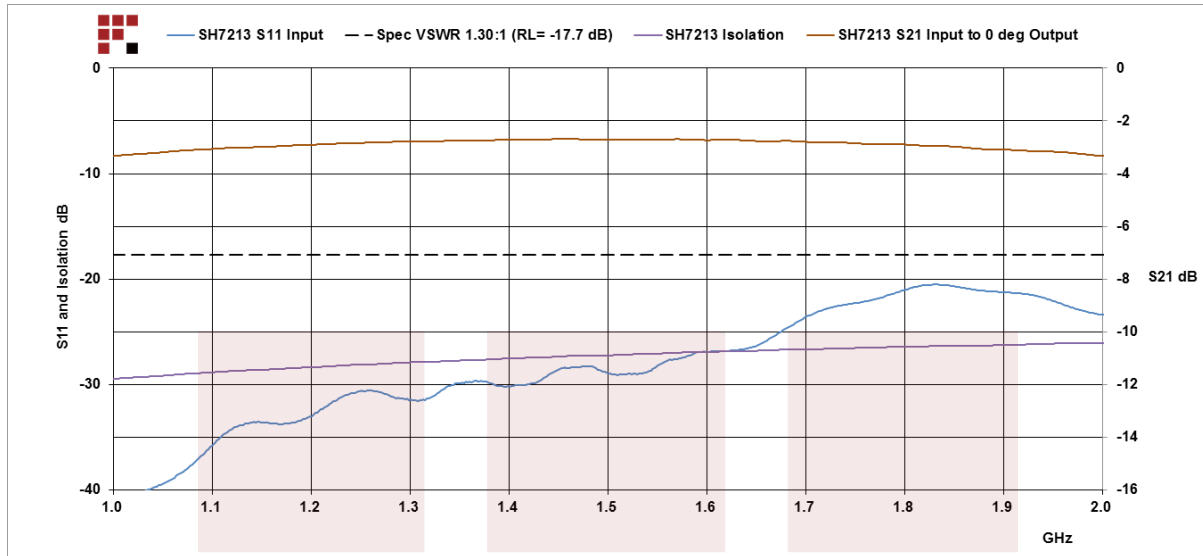
- 90° Hybrid Coupler
- 1 to 2 GHz Frequency Range
- Isolation > 22 dB
- VSWR < 1.3:1
- Max Power 50 Watt (CW)

**Applications:**

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

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**Typical Performance Data**

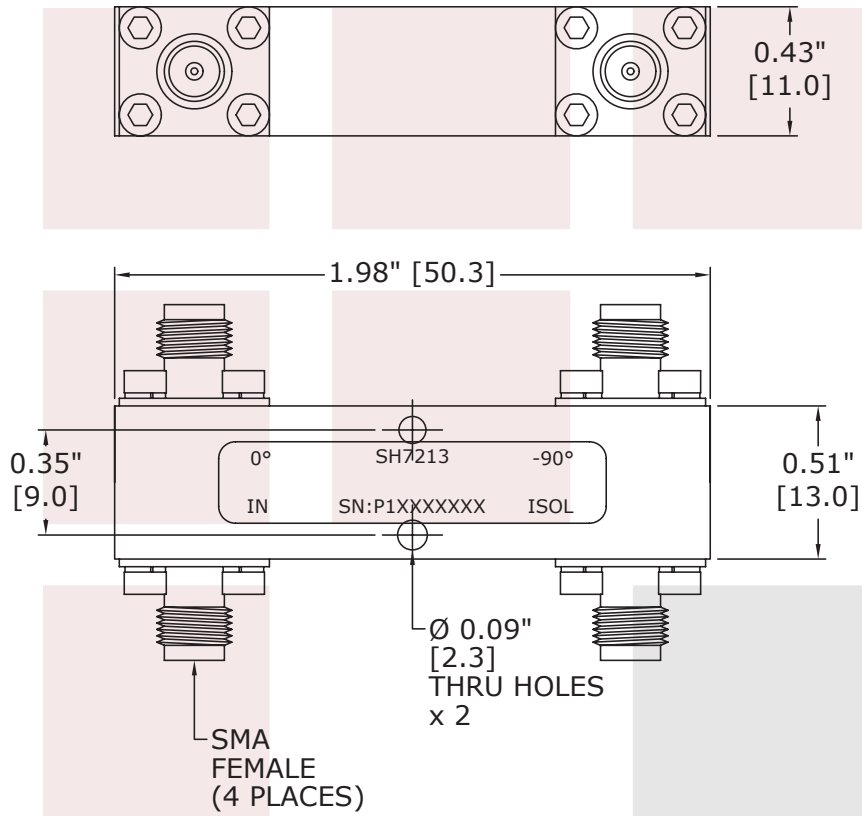


SMA 90 Degree Hybrid Coupler From 1 GHz to 2 GHz Rated To 50 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA 90 Degree Hybrid Coupler From 1 GHz to 2 GHz Rated To 50 Watts SH7213](#)

URL: <https://www.fairviewmicrowave.com/sma-90-degree-hybrid-coupler-1-2-ghz-50-watts-sh7213-p.aspx>

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TITLE SMA 90 Degree Hybrid Coupler From 1 GHz to 2 GHz Rated To 50 Watts		DWG NO SH7213		CAGE CODE 3FKR5	
CAD FILE	061416	SHEET	SCALE	N/A	SIZE A 3045