

20 dB WR-51 Waveguide Crossguide Coupler with UG Square Flange and SMA Female Coupling Port from 16 GHz to 17.5 GHz in Brass

FMWCP1097S-20

Features

- · Three Port Crossguide Waveguide Coupler
- 20±0.7 dB Nominal Coupling Level
- Integrated SMA Female Connector for the coupled port
- · 16 GHz to 17.5 GHz Frequency Range
- Low VSWR < 1.2:1

Applications

- · Test Benches
- Radar
- Satellite
- · Microwave Radio

- · Attenuation Measurements
- Power Measurements
- · Source Leveling

Description

The FMWCP1097S-20 is a 20 dB WR-51 three port crossguide Coupler withh integrated SMA Female connector for the coupled port. This coupler can be mounted directly into the waveguide signal path, connected via coax to allow signal sampling /monitoring. The coupler has a typical VSWR of 1.1:1 and are made of Brass with UG Square flanges. The FMWCP1097S-20 is part of a family of cross guide couplers offered by Fairview Microwave with coupling values ranging from 20 to 50 dB.

Electrical Specifications

Description	Min	Тур	Max	Units
Frequency Range	16		17.5	GHz
Impedance		50		Ohms
Coupler				
Nominal Coupling Level		20		dB
Coupling Accuracy		±0.7		dB
Directivity	20			dB
Insertion Loss			0.1	dB
Main Line VSWR			1.1:1	
Secondary Line VSWR			1.2:1	
Input Power (CW)			350	Watts
Input Power, Peak			20	kWatts

Mechanical Specifications

Size

 Length
 2.76 in [70.1 mm]

 Width
 2.36 in [59.94 mm]

 Height
 1.31 in [33.27 mm]

 Weight
 1 lbs [453.59 g]

Interface

Waveguide Size

Flange Type

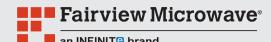
Flange Material and Plating RF Connector Type

WR-51

UG Square Flange

Brass Copper, Passivated Stainless Steel

SMA Female



20 dB WR-51 Waveguide Crossguide Coupler with UG Square Flange and SMA Female Coupling Port from 16 GHz to 17.5 GHz in Brass



FMWCP1097S-20

Coupler Body Material and Plating Coupler Body Plating Specification

Brass Copper, Passivated Stainless Steel Anticorrosion grey paint

Environmental Specifications

Temperature

Operating Range -40 to +70 deg C Storage Range -55 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

20 dB WR-51 Waveguide Crossguide Coupler with UG Square Flange and SMA Female Coupling Port from 16 GHz to 17.5 GHz in Brass 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 Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: 20 dB WR-51 Waveguide Crossguide Coupler with UG Square Flange and SMA Female Coupling Port from 16 GHz to 17.5 GHz in Brass FMWCP1097S-20

URL: https://www.fairviewmicrowave.com/20db-wr51-waveguide-crossguide-coupler-ug-square-flange-17.5ghz-fm-wcp1097s-20-p.aspx

The information contained within 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 impliment 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 liability arising out of the use of any part or document.

FMWCP1097S-20 CAD Drawing

20 dB WR-51 Waveguide Crossguide Coupler with UG Square Flange and SMA Female Coupling Port from 16 GHz to 17.5 GHz in Brass

