

WHC0510A

470 – 930 MHz, Hybrid Coupler, 90 Degree, 10 Watts CW

November 2013, REV C



Key Features

- Wide band, 470 - 930 MHz
- Low insertion loss, 0.50 dB typ.
- High isolation, 18 dB min.
- Excellent VSWR, 1.22:1 typ.
- 90 degree Hybrid, SMA Connector
- Precision machined housing
- RoHS compliant

Applications

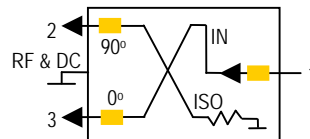
- Balance wide band power amplifier
- Digital Broadcast
- RF bench test
- Wireless applications



Absolute Maximum Ratings

Input Power (at port 1)	CW, 10W
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

Functional Block Diagram



Ordering Information

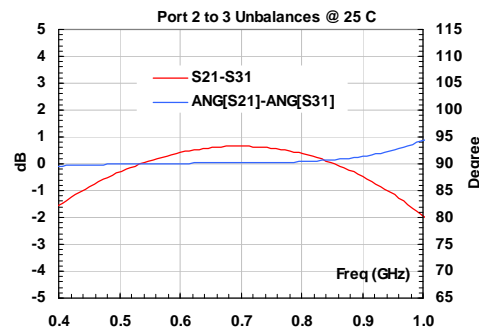
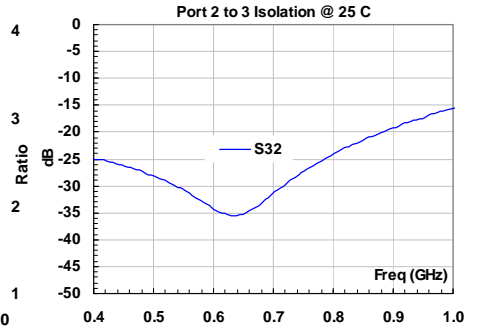
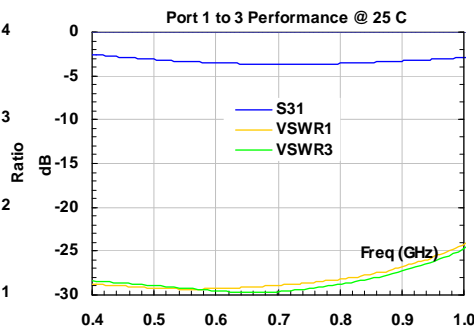
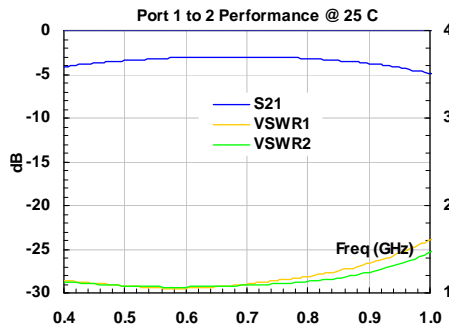
Model	Connector
WHC0510A	SMA Female

Marking: WHC0510A

Specifications (Tested at +25°C)

Item	Symbol	Test Constraints	Min	Typ	Max	Unit
Frequency Range	BW	50 Ohm Impedance	470		930	MHz
Insertion Loss	S_{21} , S_{31}	470 – 930 MHz, above 3 dB		0.5	1.1	dB
Isolation	S_{23}	470 – 930 MHz, 50 Ohm load at port C	18	20		dB
VSWR	SWR_i	470 – 930 MHz, all ports		1.22:1	1.5:1	Ratio
Amplitude Unbalance	$S_{21} - S_{31}$	470 – 930 MHz		0.4	0.8	dB
Phase Offset	$S_{21} - S_{31}$	470 – 930 MHz	85	90	95	Deg
Power Handling	P_{MAX}	470 – 930 MHz, CW			10	W
Operating Temp	T_o		-40		+85	°C

Typical Performance



Outline, IP-1

