6-18GHz Broadband Directional Coupler

Product Overview

AT Microwave offers high performance and broadband directional couplers from DC-67GHz, with SMA, SMA, 2,4mm and 1.85mm connectors.

Based on our excellent design work, precise machine tolerance and outstanding quality plating, we can provide band pass filter with low insertion loss, good return loss and high rejection at the same time.

More information, please visit www.atmicrowave.com

Advantages

- ✓ Broadband Performance
- ✓ Excellent Coupling Accuracy
- ✓ High Directivity
- ✓ Good Return Loss

Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Key Features

Parameter	Min	Typical	Max
Frequency		6-18GHz	
Mean Coupling		20 dB	
Coupling Accuracy		+/-1dB	
Main Line Extra Insertion Loss		-0.45dB	-0.8dB
Main Line VSWR		1.5	1.8
Coupling Line VSWR		1.5	1.8
Directivity	13dB	15dB	
CW Power			50W
Peak Power			3kW
Spec Temp		25C	

AT-C20-0618

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Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Aluminum
Finish	Painted
Weight	80g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
RF Input Power CW	50W
Operating Temperature	-40 to + 85C
Storage Temperature	-55 to +125C

Note:

Following is the simplified block diagram a directional coupler.

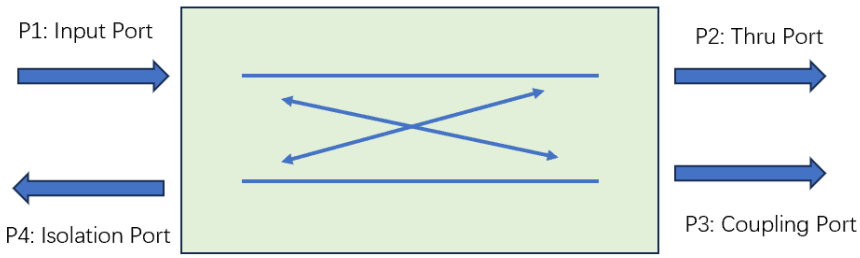
AT Microwave defines insertion loss, coupling value, isolation and directivity as:

Insertion Loss =P2+P3-P1

Coupling Value=P3/P1

Isolation Value=P4/P1

Directivity=Isolation-Coupling



Shanghai AT Microwave Limited

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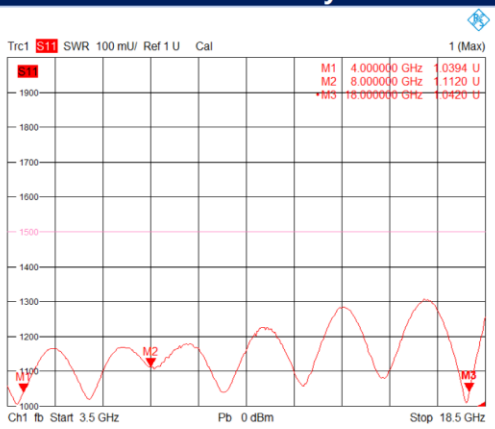
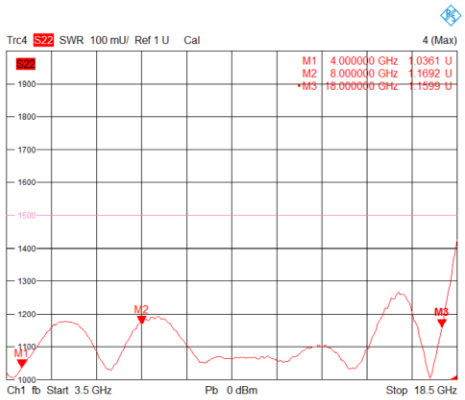
Test Data(25c)

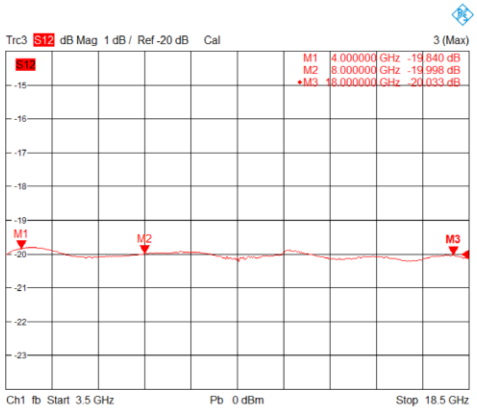
VSWR Primary



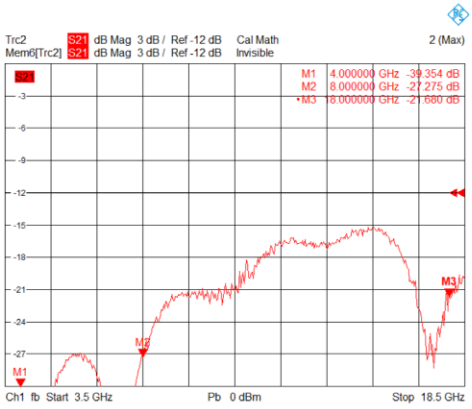
VSWR Secondary



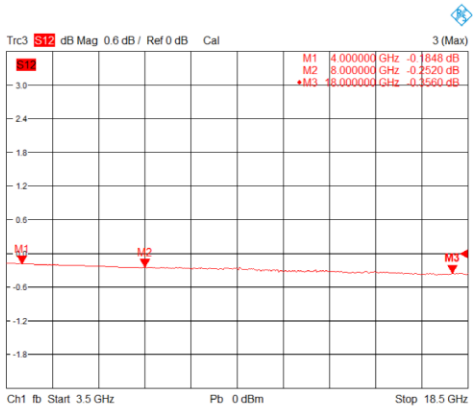
Coupling



Directivity



Insertion Loss



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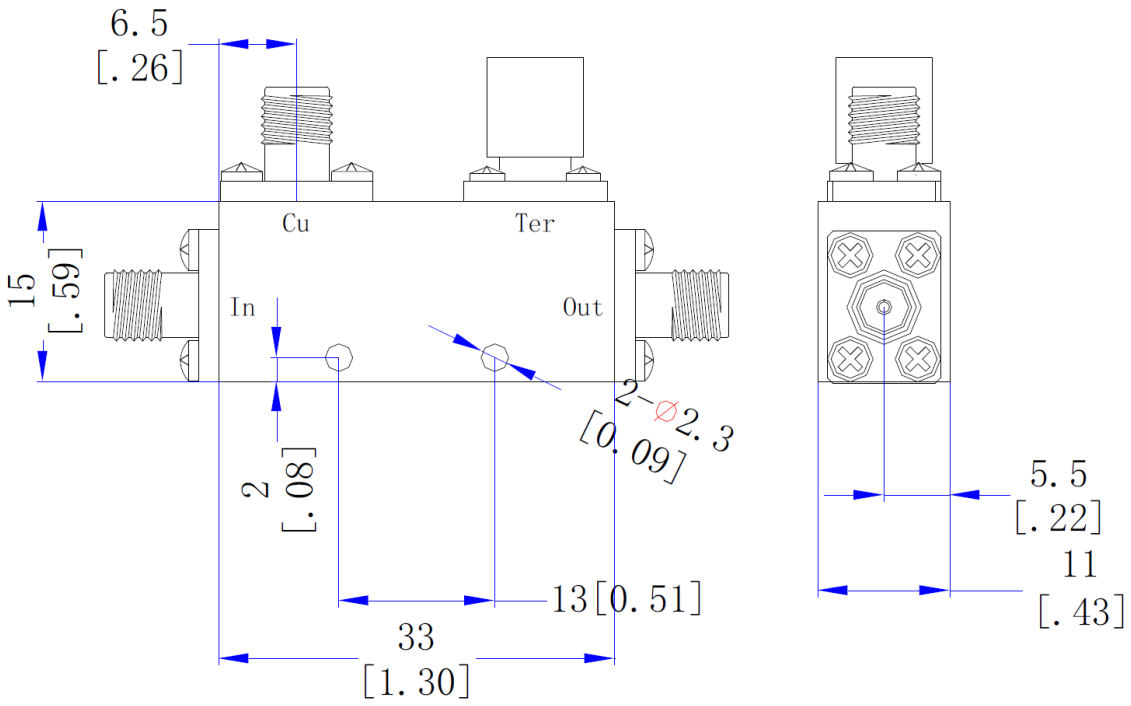
Dimension: (unit in mm)



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