AT-FD2-30

0.5-30GHz Frequency Divider by2

Broadband Frequency Divider, /2
Frequency 0.5-30GHz, 2.92mm Female

2022-4-1

Description:

AT-FD2-30 is low noise divide-by-2 frequency divider with 2.92mm female input connector. This device operates from 500MHz to 30GHz with a single 5V supply.

This divider offers SSB phase noise of -152dBc/Hz at 100kHz, which helps the user maintain excellent system noise performance. Differential input and differential output is available according to request.

More information, visit www.atmicrowave.com

Feature

- ✓ Wideband coverage
- ✓ Low SSB phase noise
- ✓ Low current
- ✓ Small Size

Application

- ✓ 5G Systems
- ✓ Raday System
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)

Electronical Specifications:

Parameter	Min	Typical	Max
Input Frequency Range/F0		0.5-30GHz	
Minimum Input Frequency (Square wave Input)		0.2GHz	
Input Power	-10dBm	0dBm	+8dBm
Divider Rate		/2	
Output Frequency F0/2		0.25-15GHz	
Output Power	-6dBm	-3dBm	
SSB Phase Noise @100kHz		-152dBc/Hz	
Vdd		+5V	+8V
Current		35mA	
Spec Temp		25C	

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Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Weight	50g
Size:	See outline

Absolute Maximum Ratings Table

Parameter	Value
Power Supply	+13V
RF Power Handling	+15dBm
Operating Temperature	-20 to 70C
Storage Temperature	-65 to +150C

Ordering Information

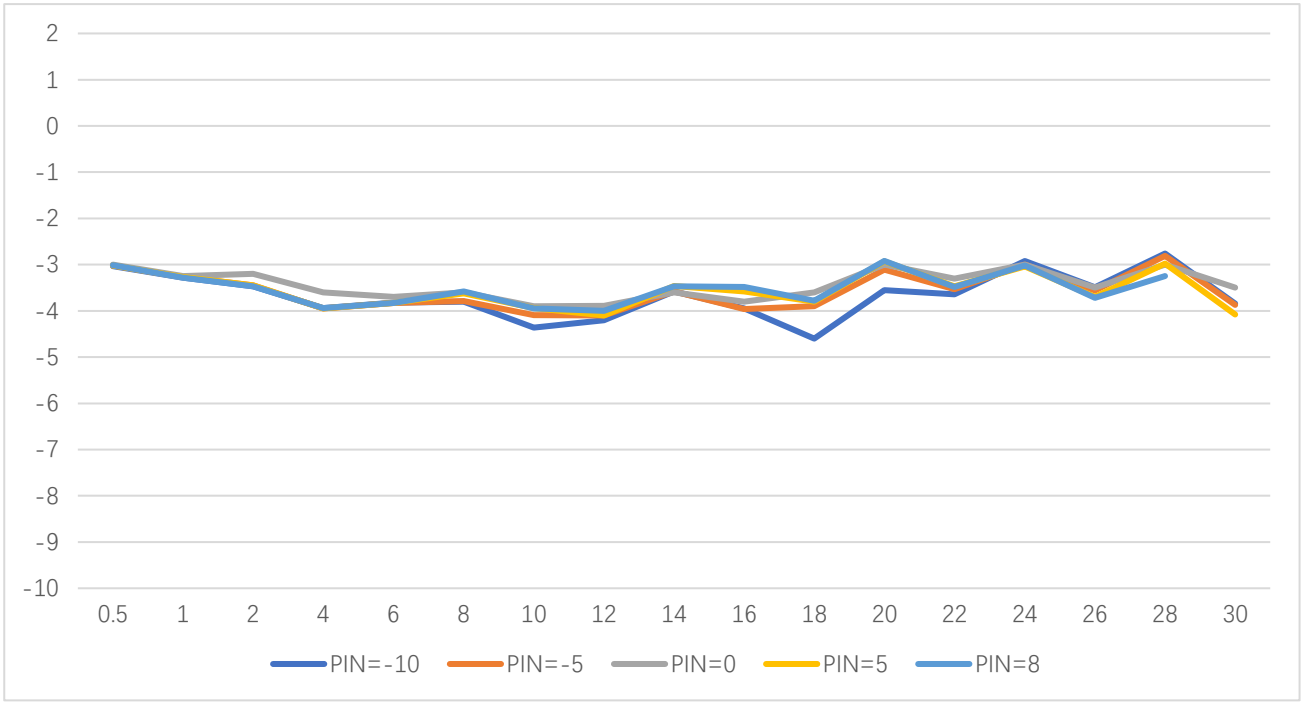
Part Number	Description
AT-FD2-30	Fixed /2, Single End Port
AT-FD2-30-DIDO	Fixed /2, Differential Input, Differential Output Port

Notes:

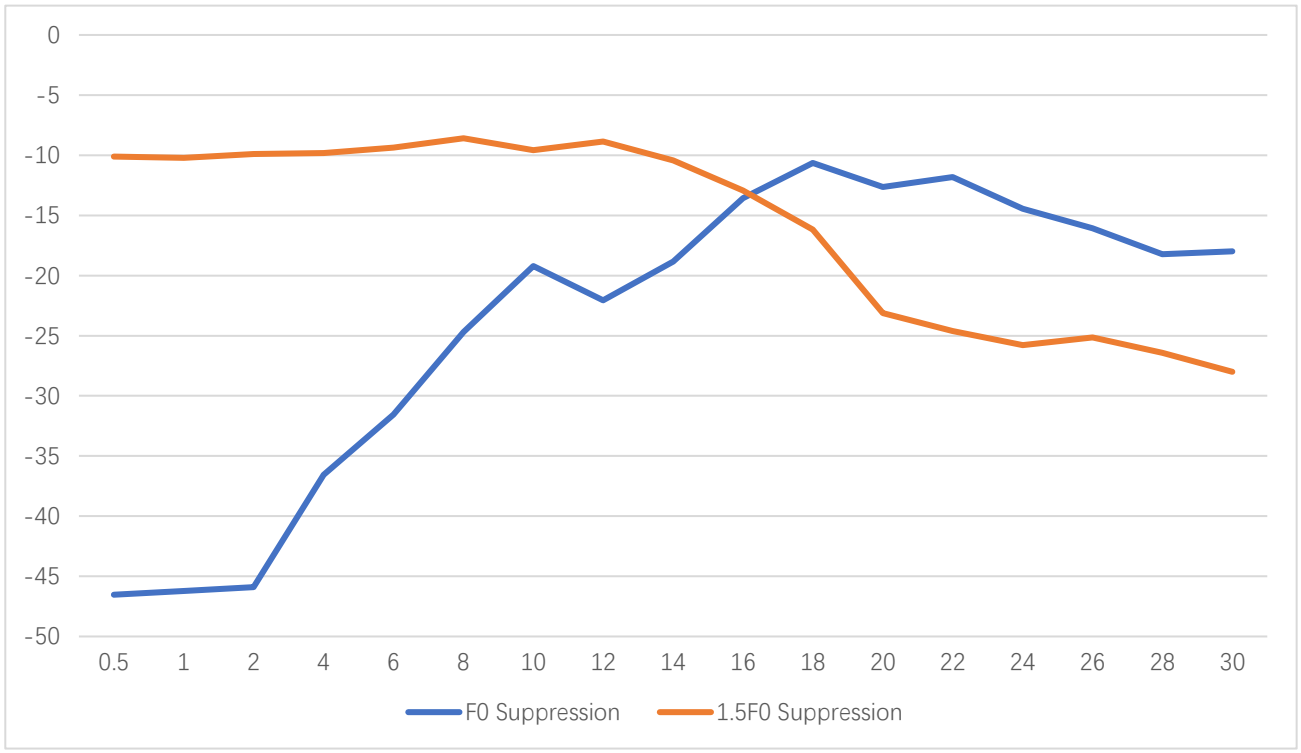
1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

Test Data:

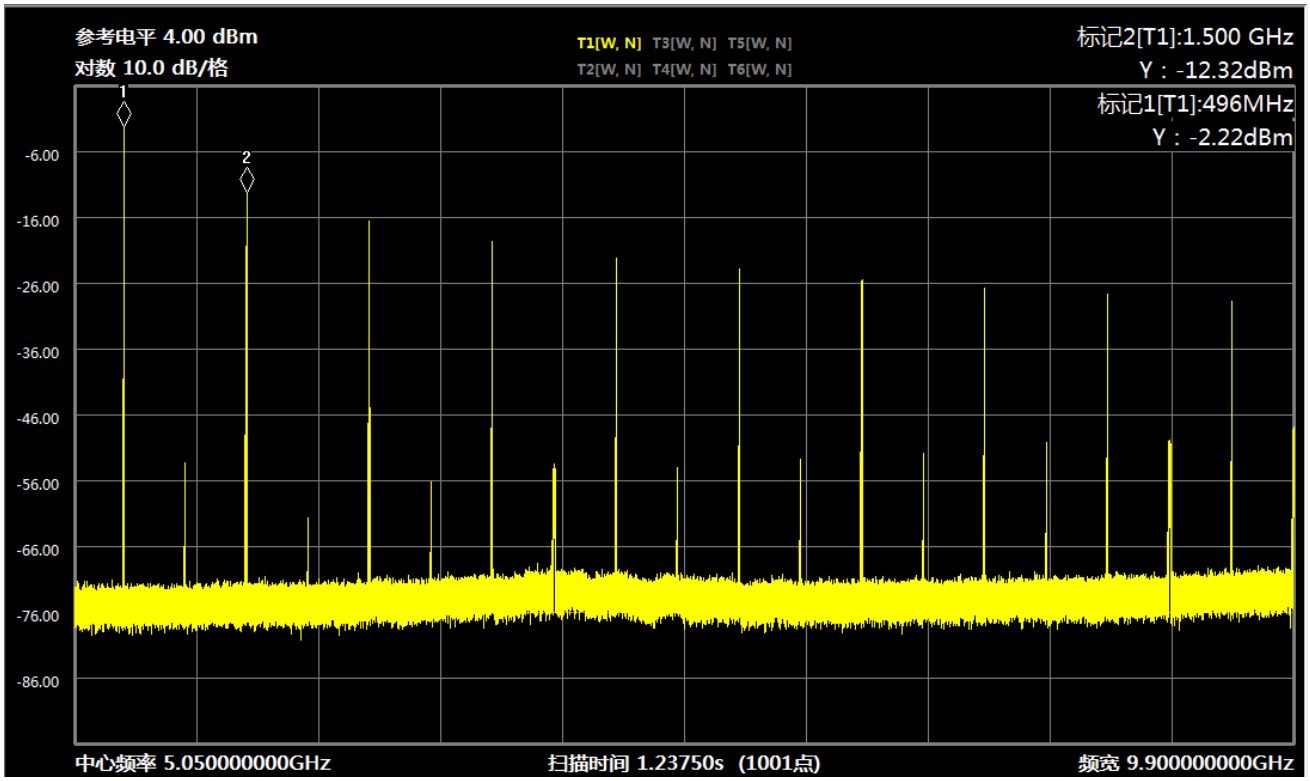
F0=Input Frequency, sinewave



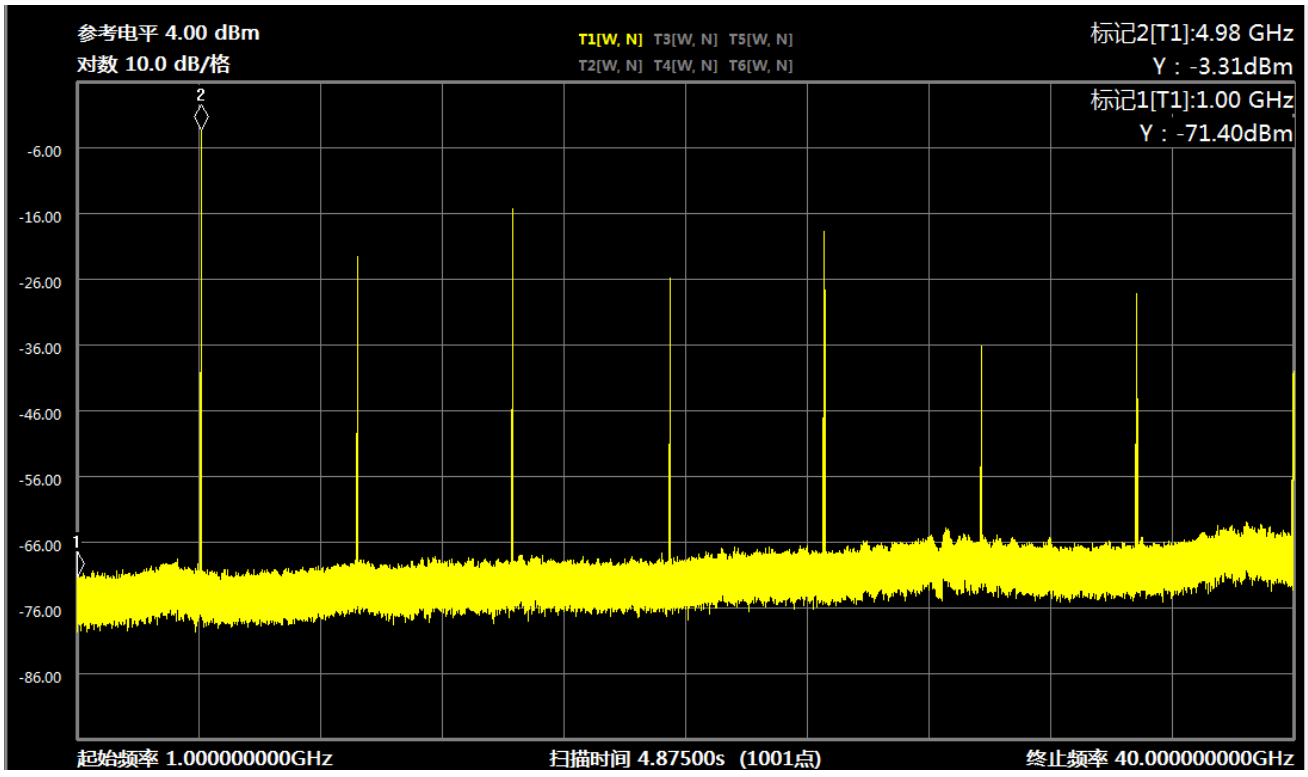
F0/2 Output Power vs F0 Frequency



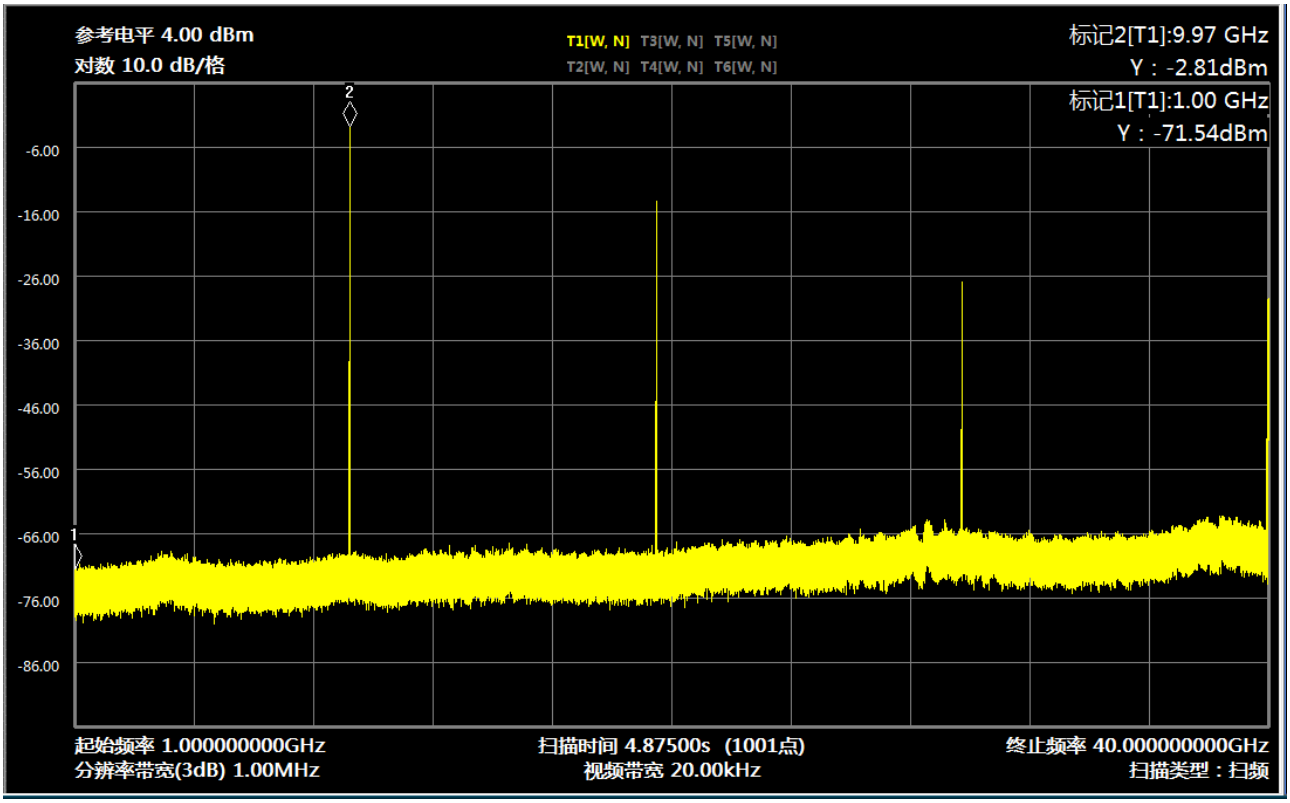
F0/1.5F0 Suppression vs F0/2



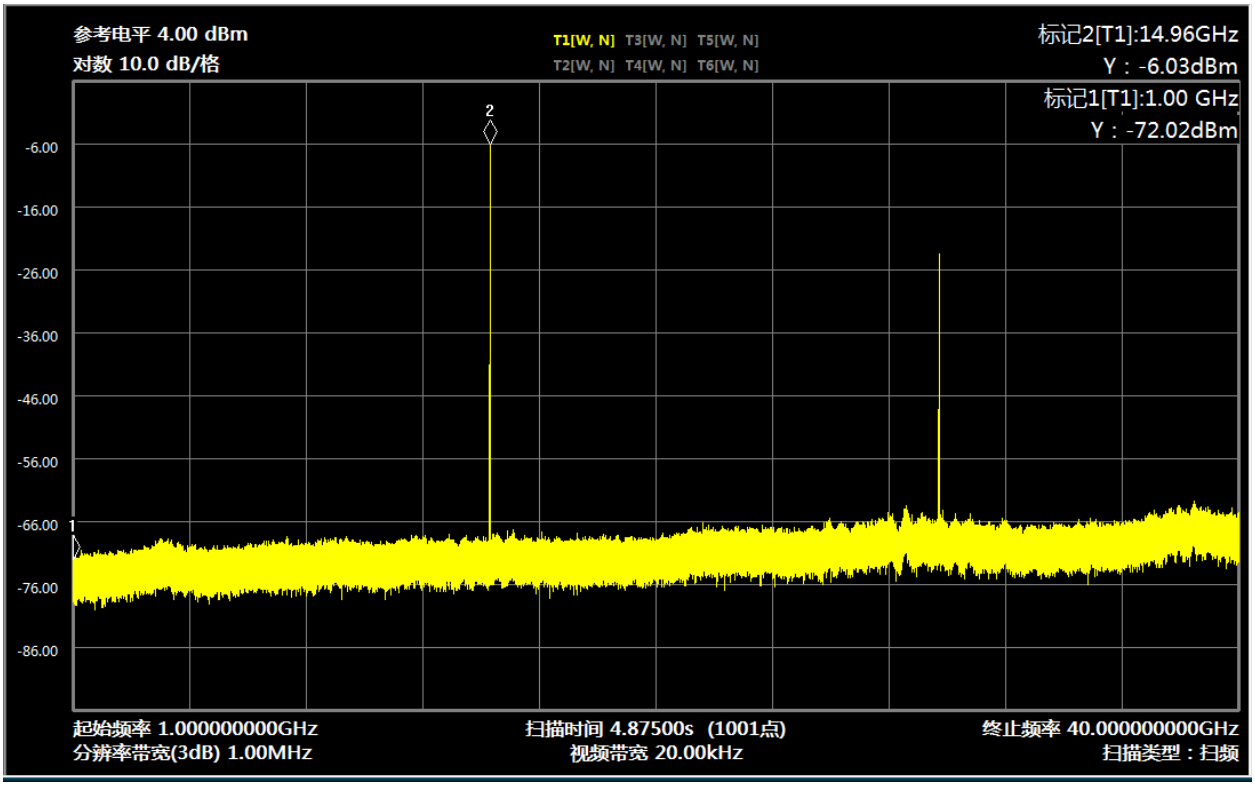
500MHz Output Frequency when Input=1GHz Pin=0dBm



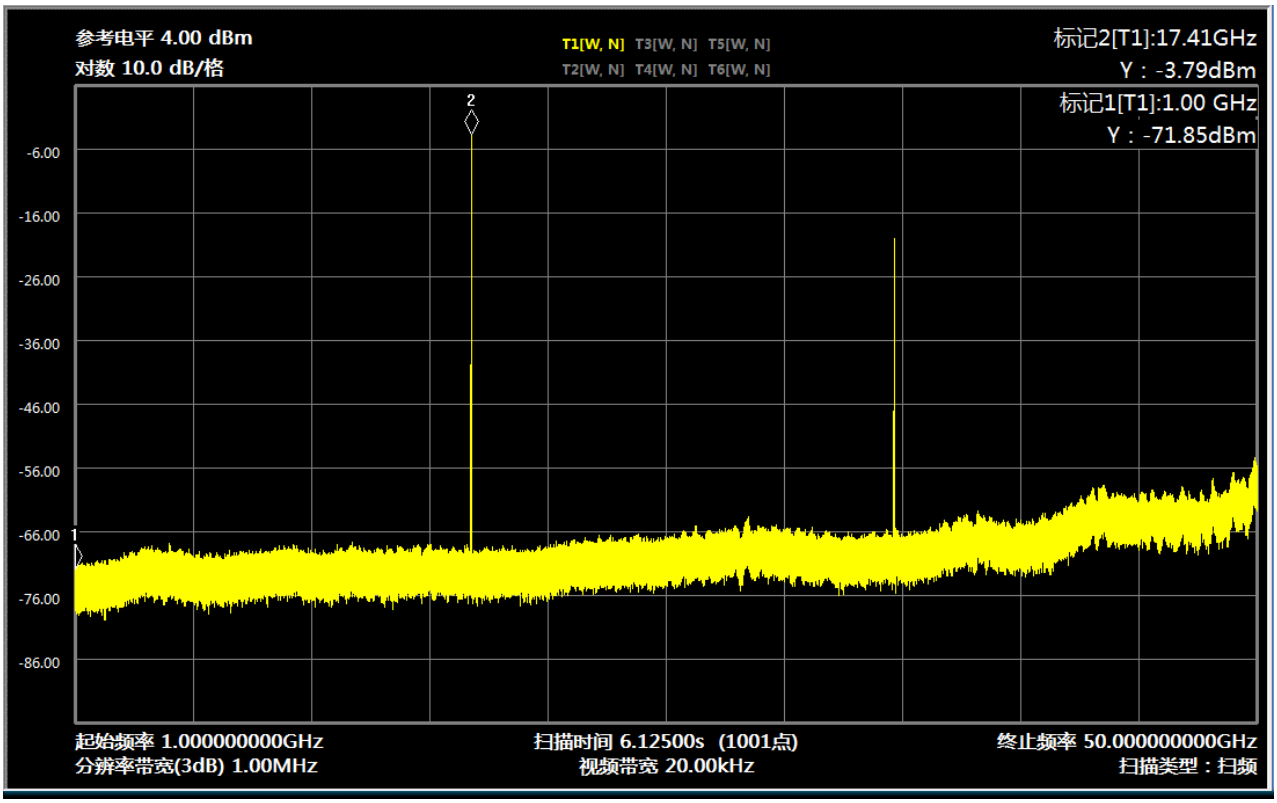
5GHz output when Input=10GHz, Pin=0dBm



10GHz output when Input=20GHz, Pin=0dBm



15GHz output when Input=30GHz, Pin=0dBm



17.5GHz output when Input=35GHz, PIN=0dBm

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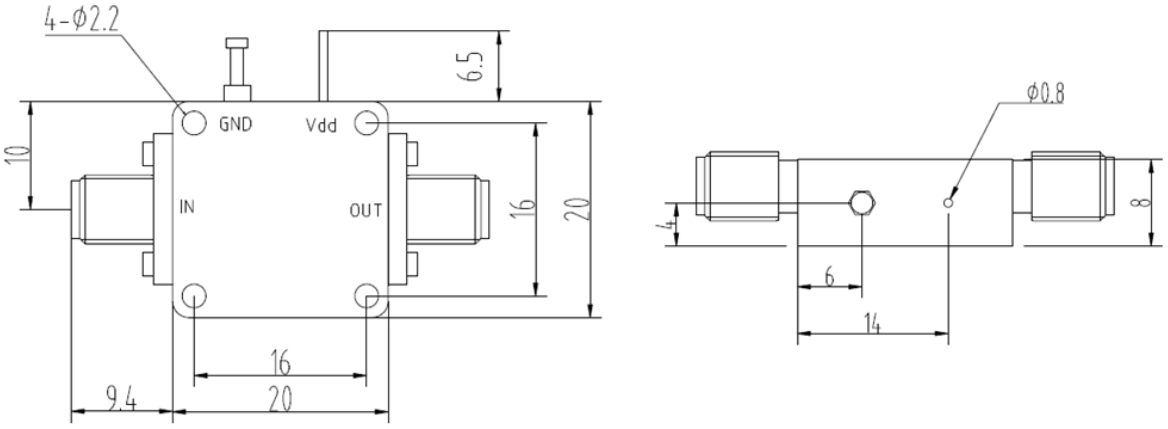
Dimension: (mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Lenth of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.

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