

0.5-30GHz Broadband Frequency Divider, /4

2022-4-22

Description:

AT-FD4-30 is low noise divide-by-4 frequency divider with 2.92mm female input connector. This device operates from 500MHz to 30GHz with a single 5V supply. The input frequency can go up to 35GHz with narrow input power range.

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)
- ✓ Communication System

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	+7dBm
Divider Rate		/4	
Output Frequency F0/4		0.125-7.5GHz	
Output Power	-5dBm	-3dBm	
SSB Phase Noise @100kHz		-152dBc/Hz	
Vdd		+5V	+8V
Current		40mA	
Spec Temp		25C	





AT-FD4-30

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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

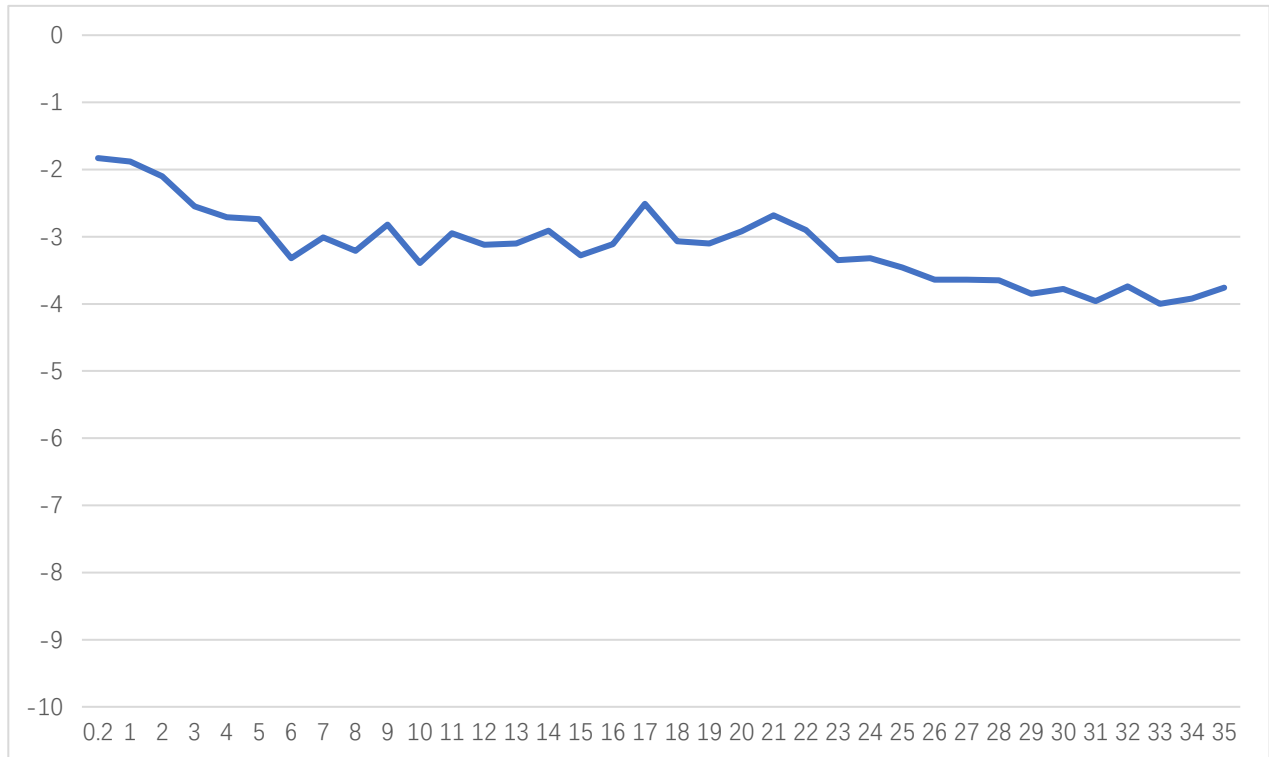
Ordering Information

Part Number	Description
AT-FD2-30	Fixed /2, Single End Port
AT-FD2-30-DIDO	Fixed /2, Differential Input, Differential Output Port
AT-FD4-30	Fixed /4, Single End Port
AT-FD4-30-DIDO	Fixed /4, Differential Input, Differential Output Port
AT-FD8-30	Fixed /8, Single End Port
AT-FD8-30-DIDO	Fixed /8, Differential Input, Differential Output Port
AT-FDN-30	Programmable Divider, N=1/2/4/8, Single End Port
AT-FDN-30-DIDO	Programmable Divider, N=1/2/4/8, Differential Output Port

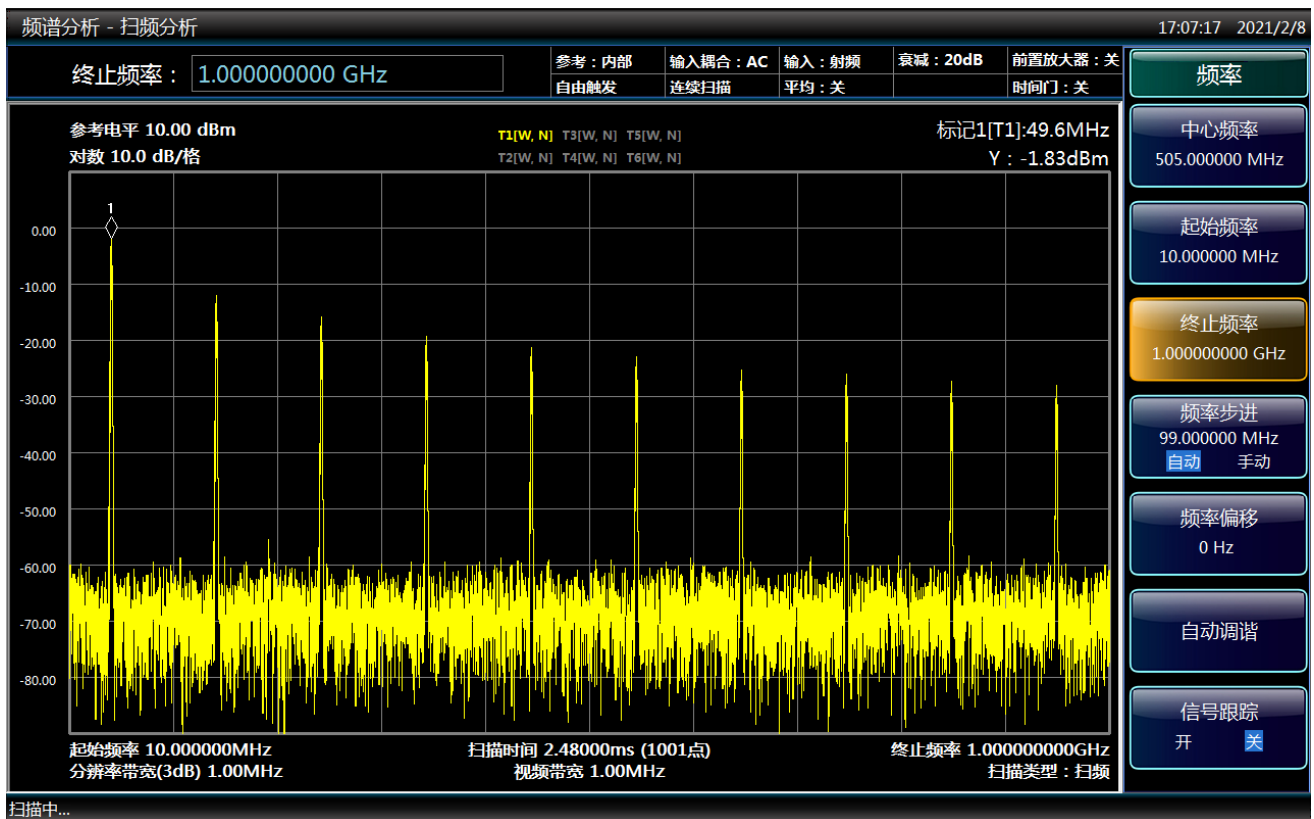
Notes:

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.



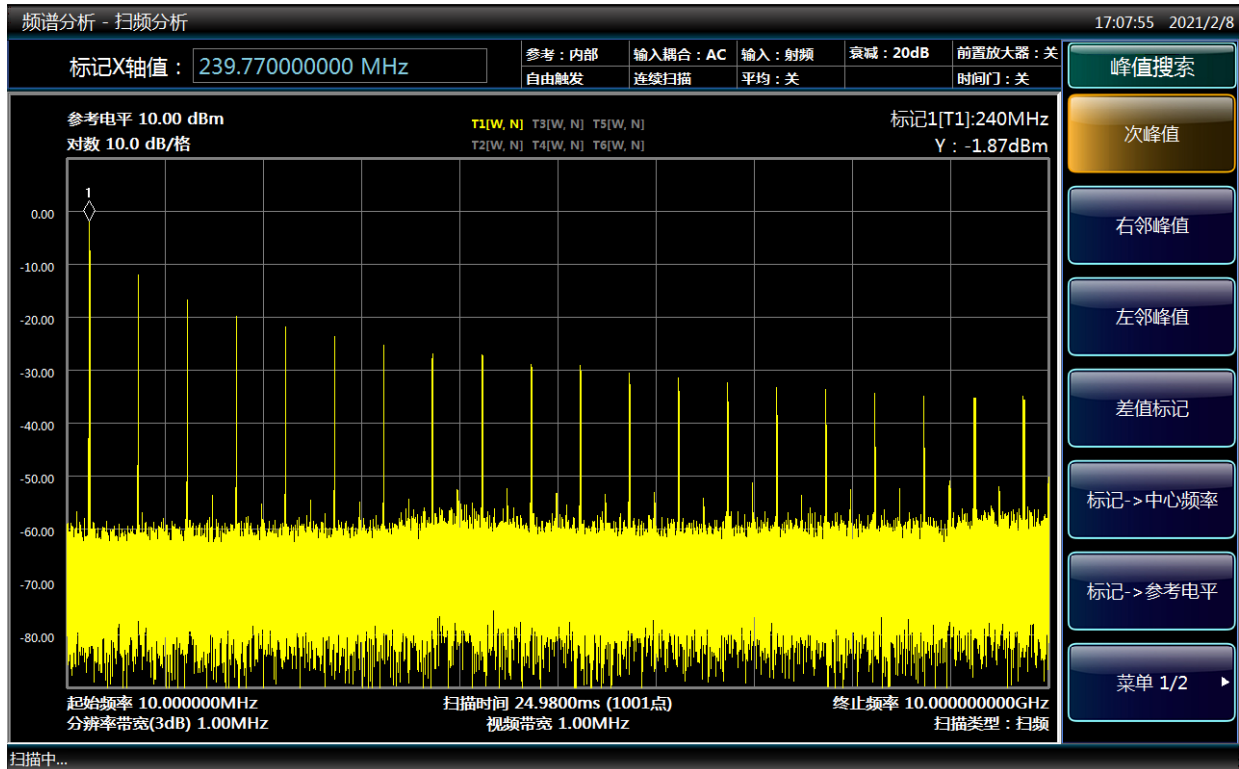


Pout vs F0 Input Frequency

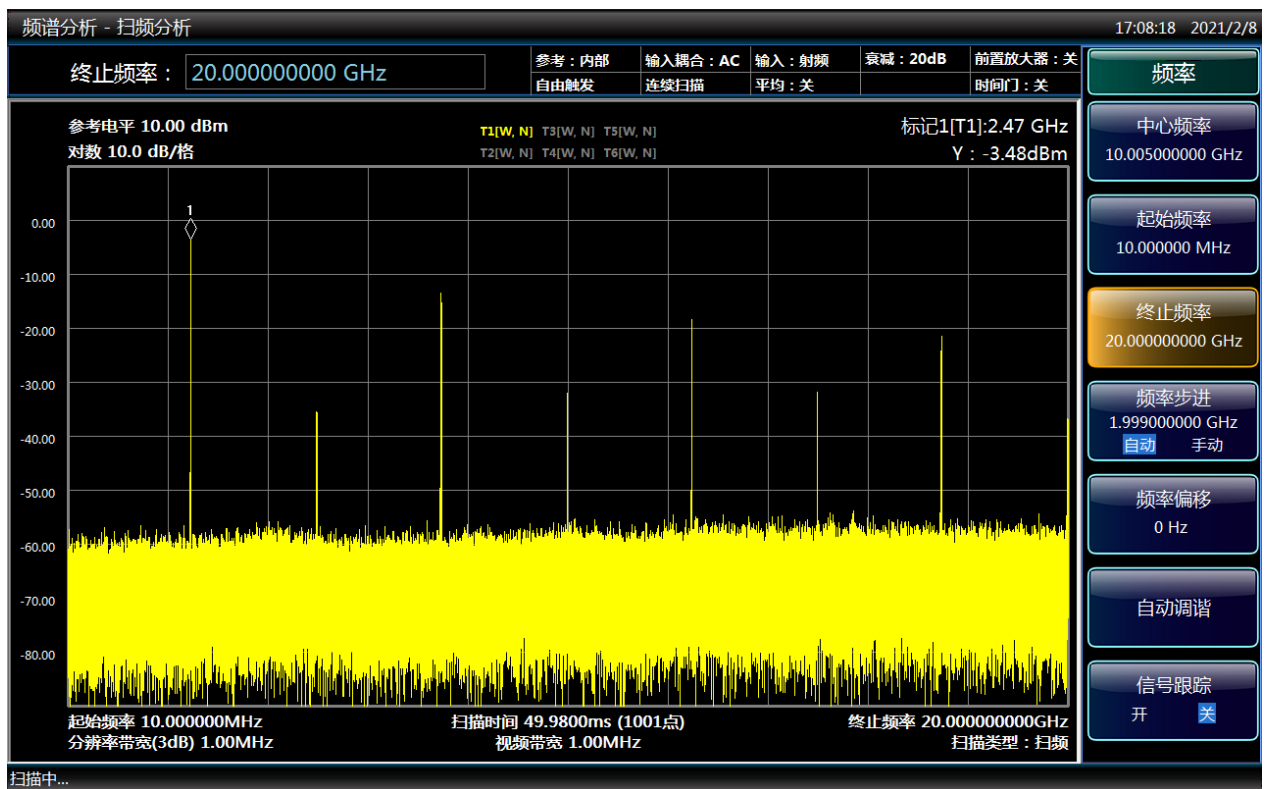


Input=200MHz, PIN=0dBm



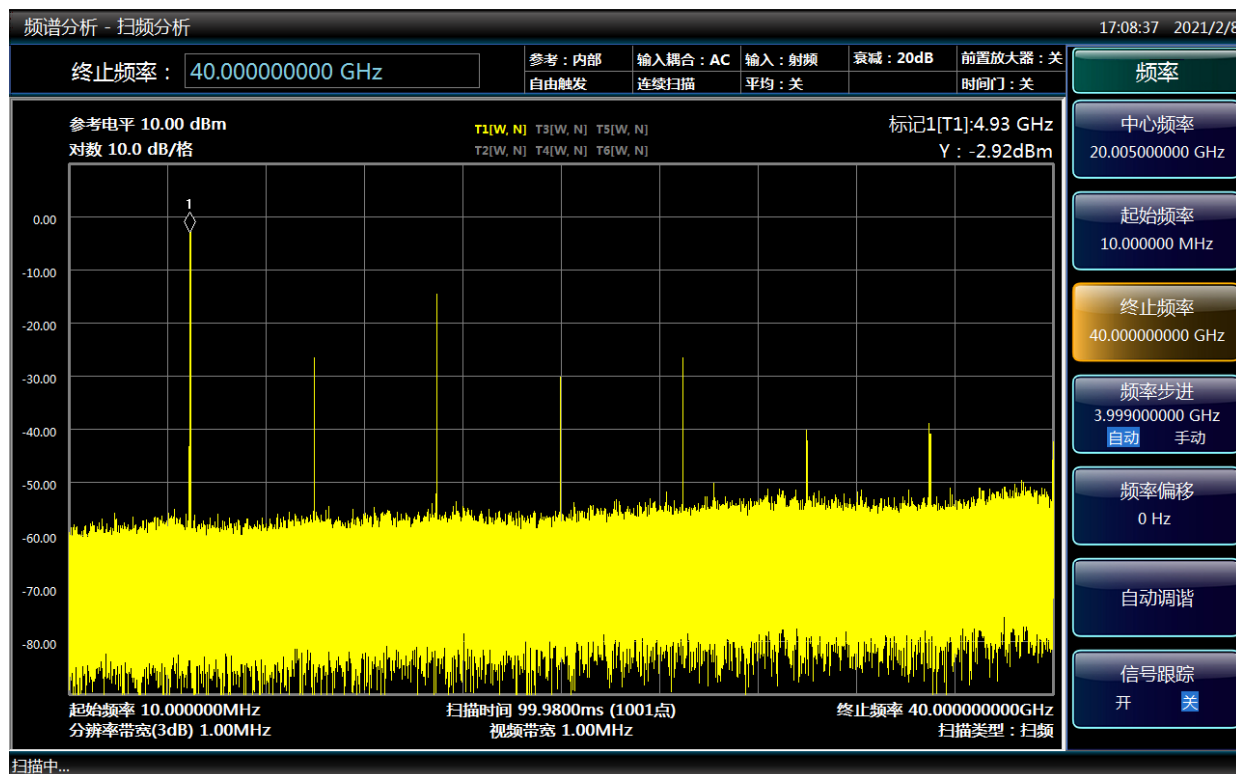


Input=1GHz, Pin=0dBm

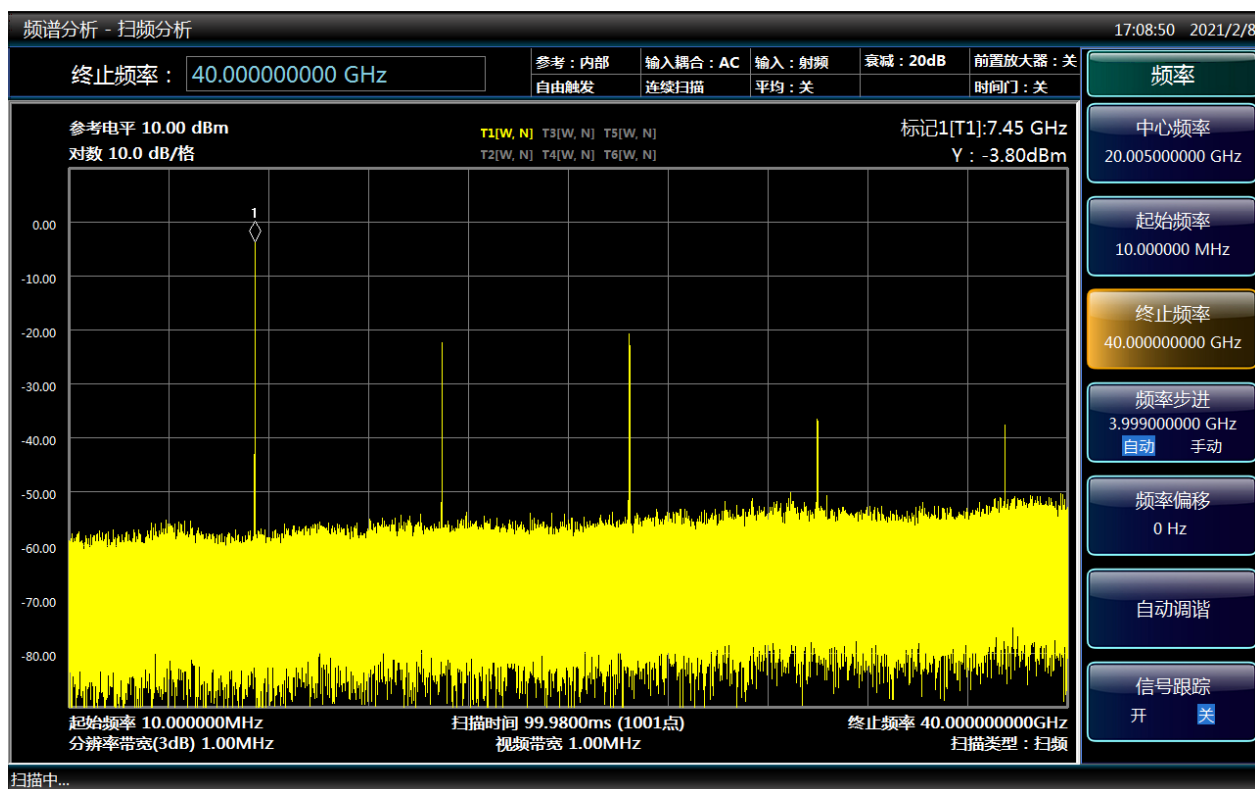


Input=10GHz, Pin=0dBm



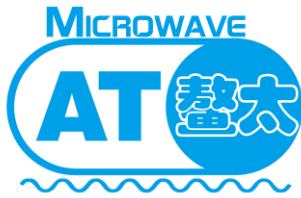


Input=20GHz, Pin=0dBm



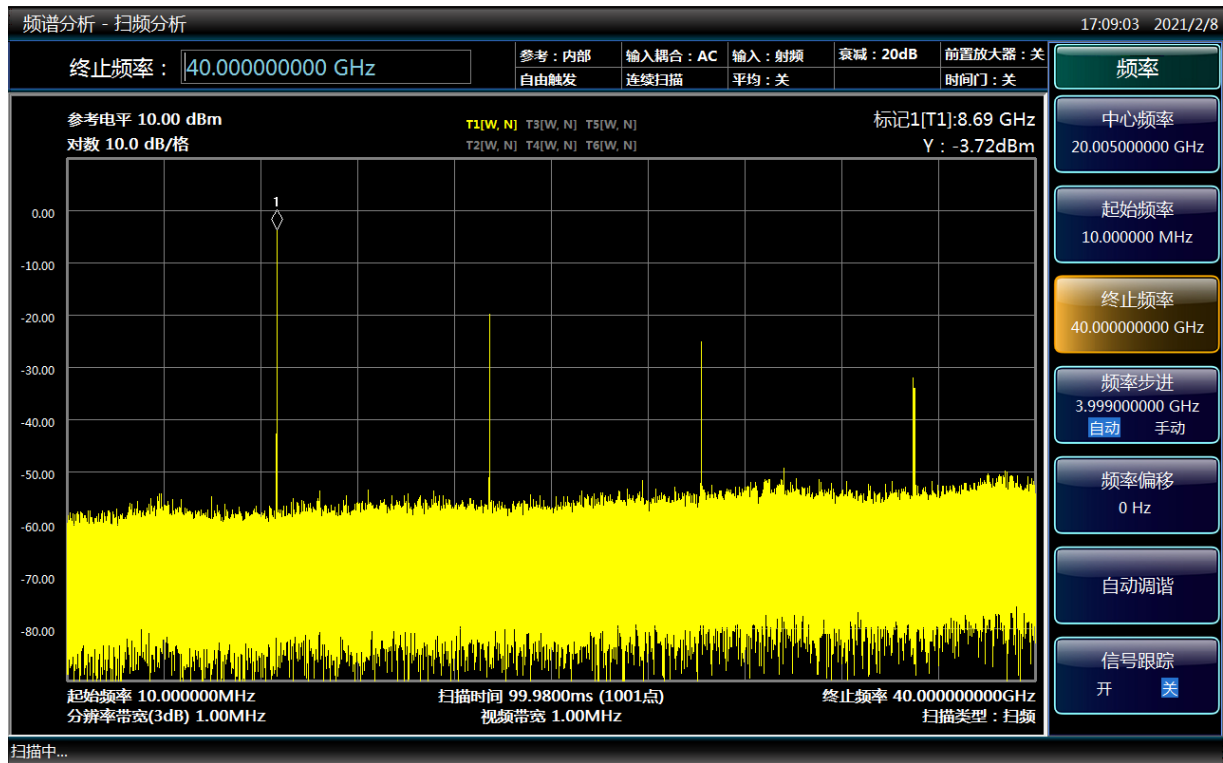
Input=30GHz, Pin=0dBm





AT-FD4-30

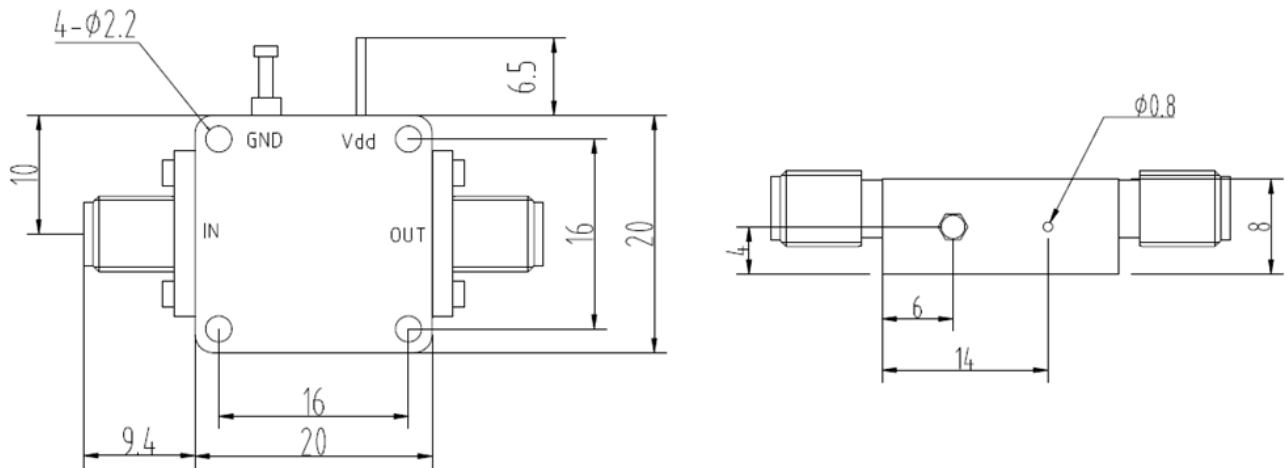
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Input=35GHz, Pin=0dBm



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.

