

30-67GHz SPDT Switch



Description:

AT-SPDT-3067 is a MMIC Based SPDT (Single pole double throw) switch covering 30-67GHz. This module offers a low insertion loss of -6 dB with typical isolation of -25dB.

It also has good return loss from 30-67GHz band in both ON and OFF state. The input and output connectors are 1.85mm Female. Other connectors can be provided according to request.

More information, visit www.atmicrowave.com

Feature

- ✓ Frequency: 30-67GHz
- ✓ Low insertion Loss, -6 dB
- ✓ High isolation: -25dBc
- ✓ Very fast speed

Application

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

Electronical Specifications:

Parameter	Min	Typical	Max
Frequency(Note1)	30GHz	40-60	67GHz
Insertion Loss		-6dB	
Isolation	-20dB	-25 dB	
Return Loss	-5	-10dB	
Switching Time, Estimated		10ns	
Control Voltage		-1.2 and 0 V	
Power Consumption		0mW	
RF Port		1.85mm Female	
Bias Port		Feed Through Pin	
Dimension		27.9x26x10mm	





AT-SPDT-3067

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Absolute Maximum Ratings Table

Parameter	Value
Control Voltage	-2 to 0.7V
RF Input Power	+15dBm
Operating Temperature	-40 to +85C
Storage Temperature	-65 to +150C

Truth Table

State	V1	V2	RF2 to RF1	RF3 to RF1
1	-1.2V	0	OFF	ON
2	0	-1.2V	ON	OFF
3	-1.2V	-1.2V	ON	ON
4	0	0	OFF	OFF

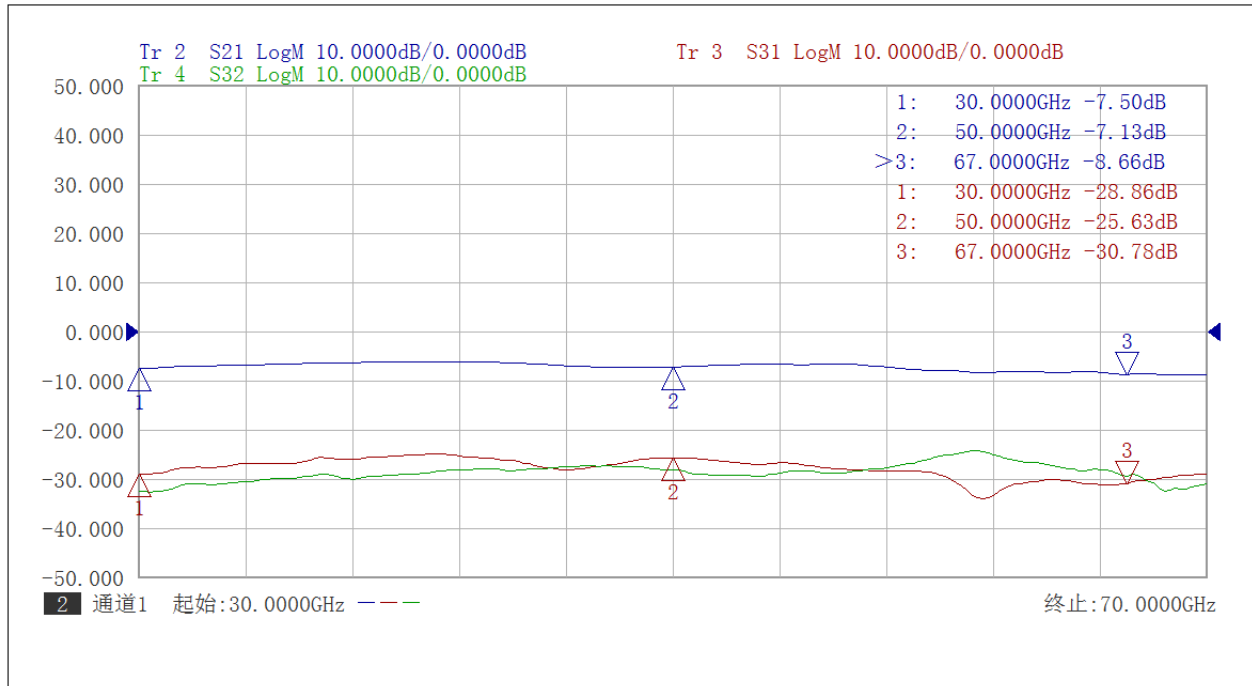
Notes:

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.

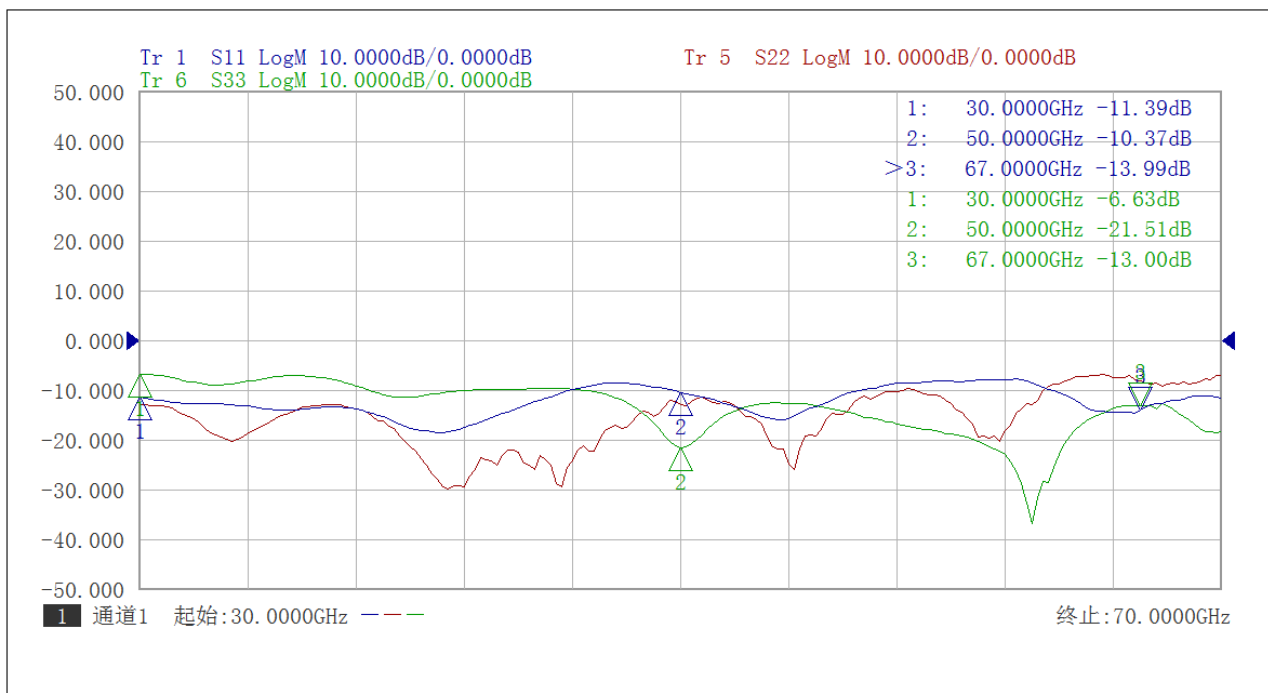


Test Data(25C)

State 1: RF2 ON, RF3 OFF



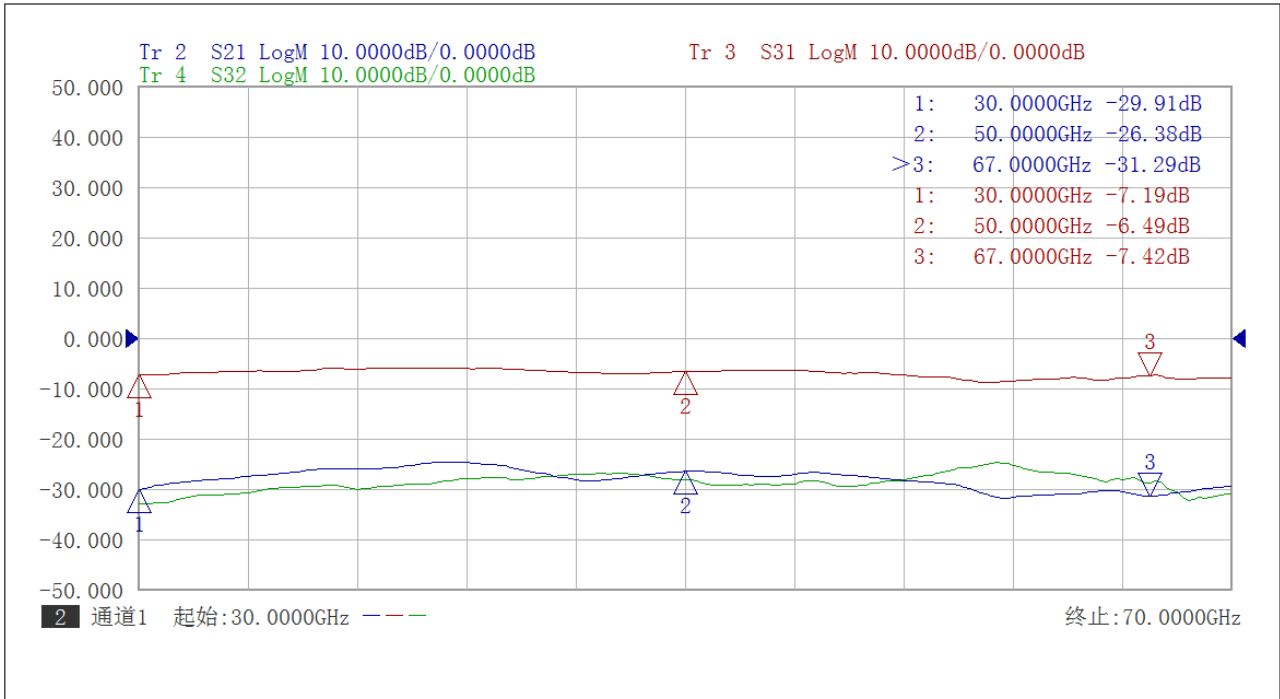
S21 Insertion Loss vs Frequency State1 (RF2 ON, RF3 OFF)



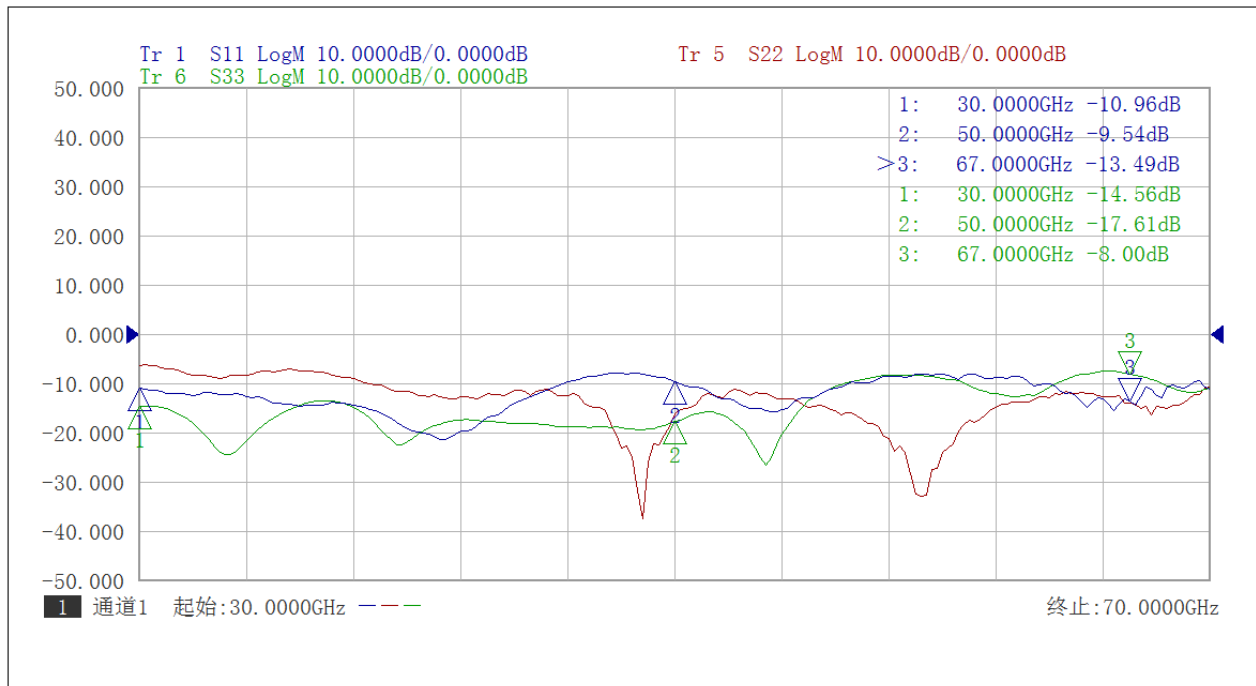
Return Loss vs Frequency State1 (RF2 ON, RF3 OFF)



State 2: RF2 OF, RF3 ON



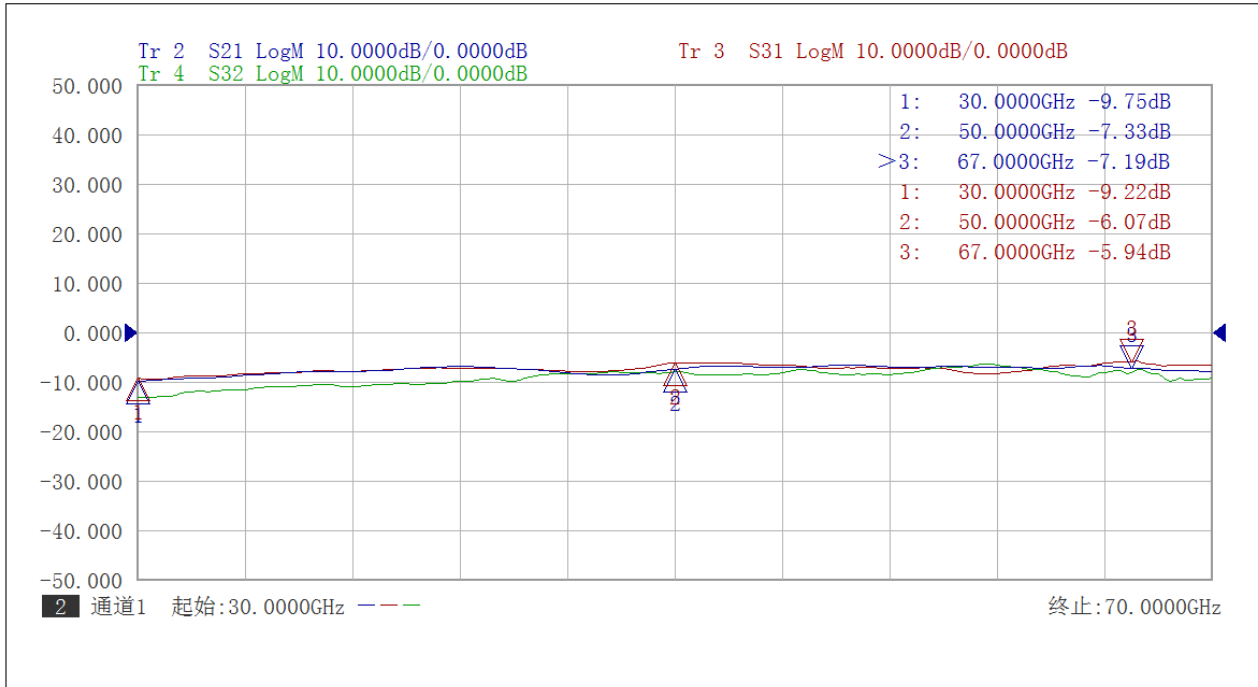
S31 Insertion Loss vs Frequency State2 (RF2 FF, RF3 ON)



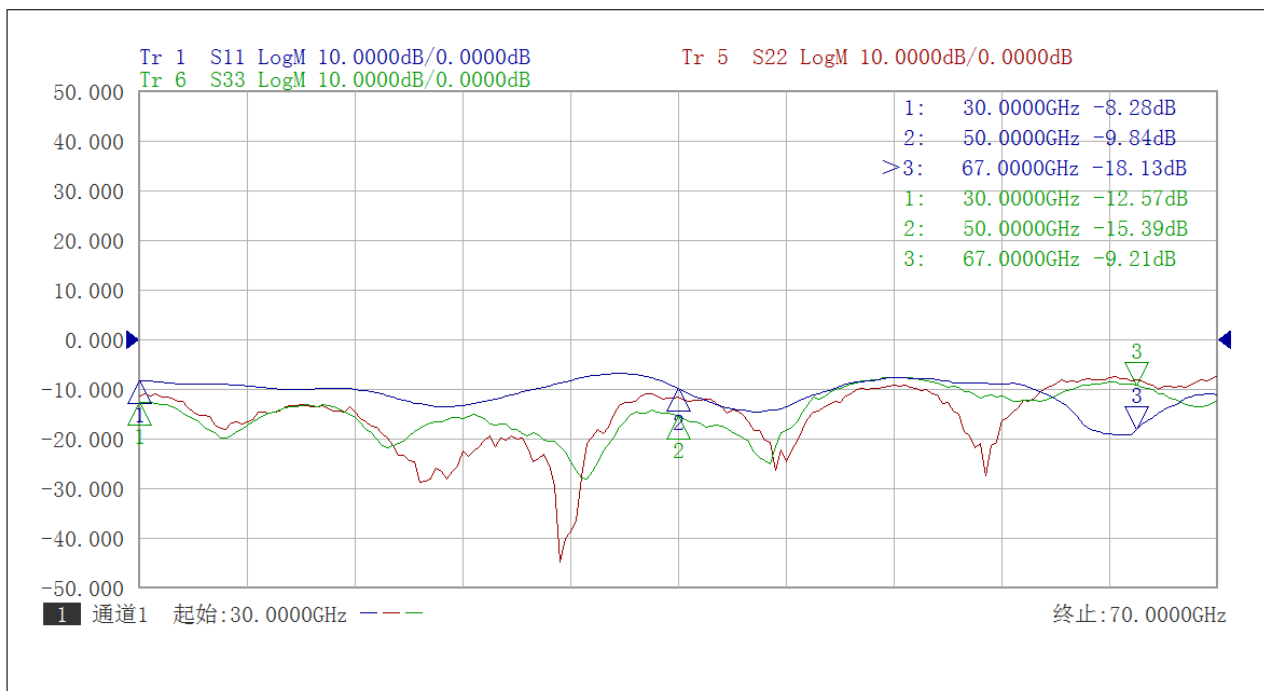
Return Loss vs Frequency State2 (RF2 FF, RF3 ON)



State 3: Both RF2/RF3 ON



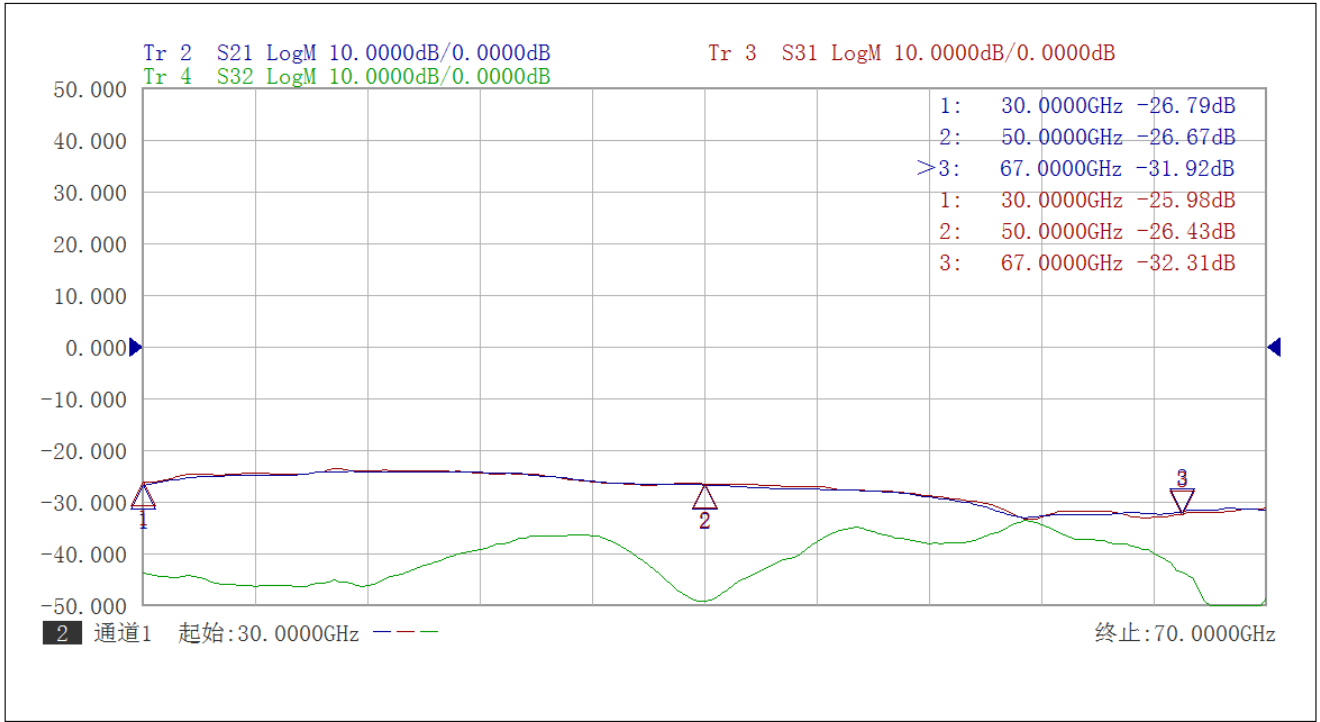
S21/S31 Insertion Loss vs Frequency State3(Both RF2/RF3 ON)



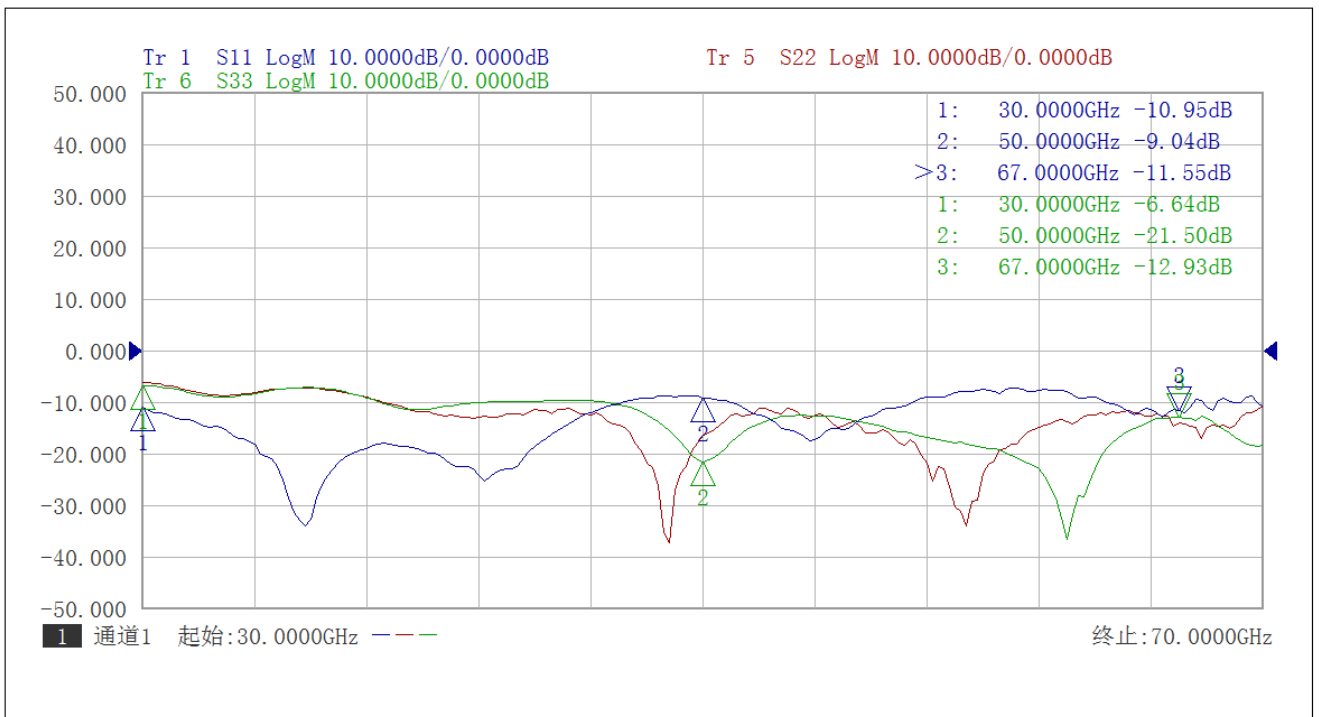
Return Loss vs Frequency State3(Both RF2/RF3 ON)



State 4: Both RF2/RF3 OFF



S21/S31 Insertion Loss vs Frequency State4(Both RF2/RF3 OFF)



Return Loss vs Frequency State4(Both RF2/RF3 OFF)



Dimension (mm)

单位: mm

