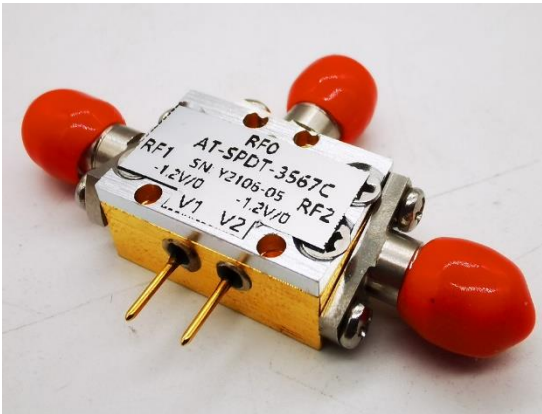


35-67GHz SPDT Switch



Description:

AT-SPDT-3567C is a MMIC Based SPDT (Single pole double throw) switch covering 35-67GHz. This module offers a low insertion loss of -6 dB with typical isolation of -25dB.

It also has good return loss from 35-67GHz 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: 35-67GHz
- ✓ 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) | 35GHz | 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-3567C

35-67GHz SPDT Switch

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 |

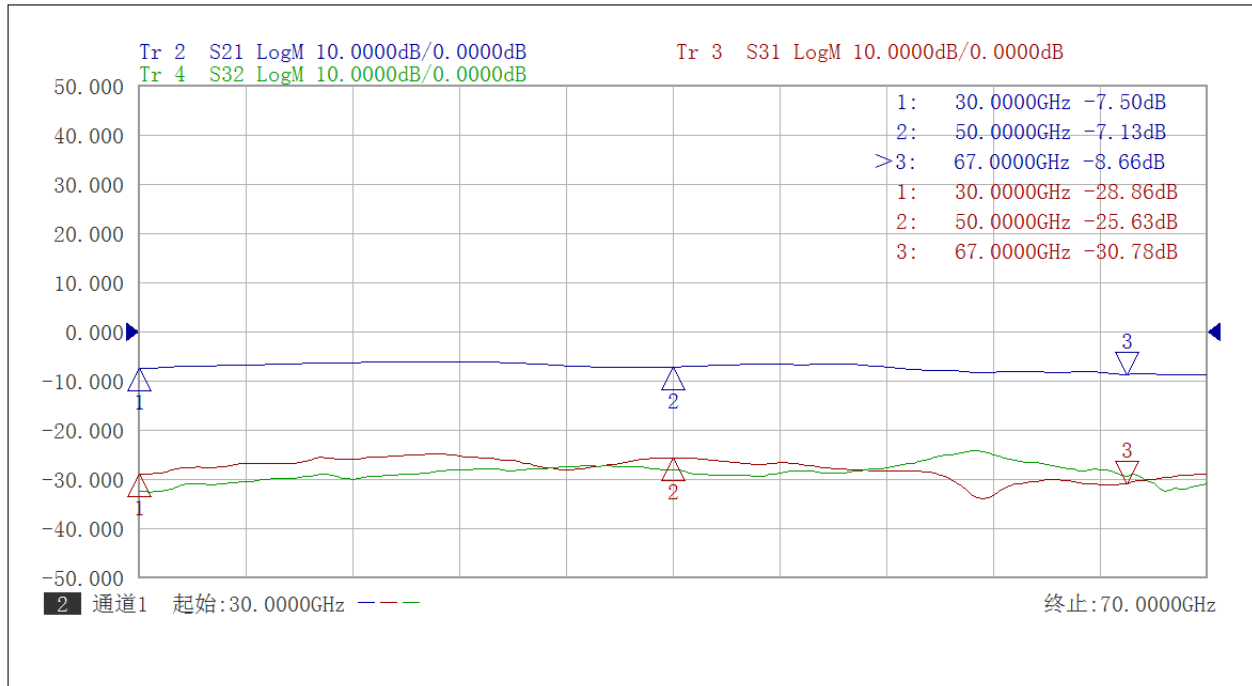
Notes:

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.

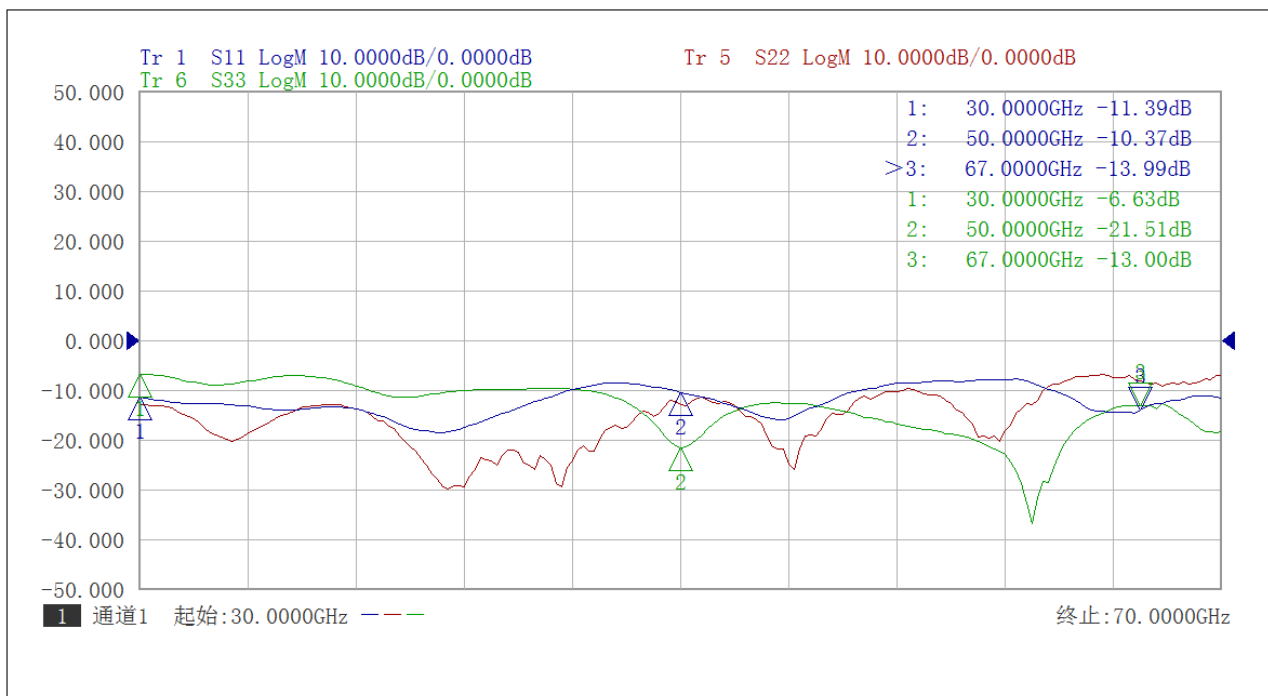


Test Data(25C)

State 1: RF2 ON, RF3 OFF



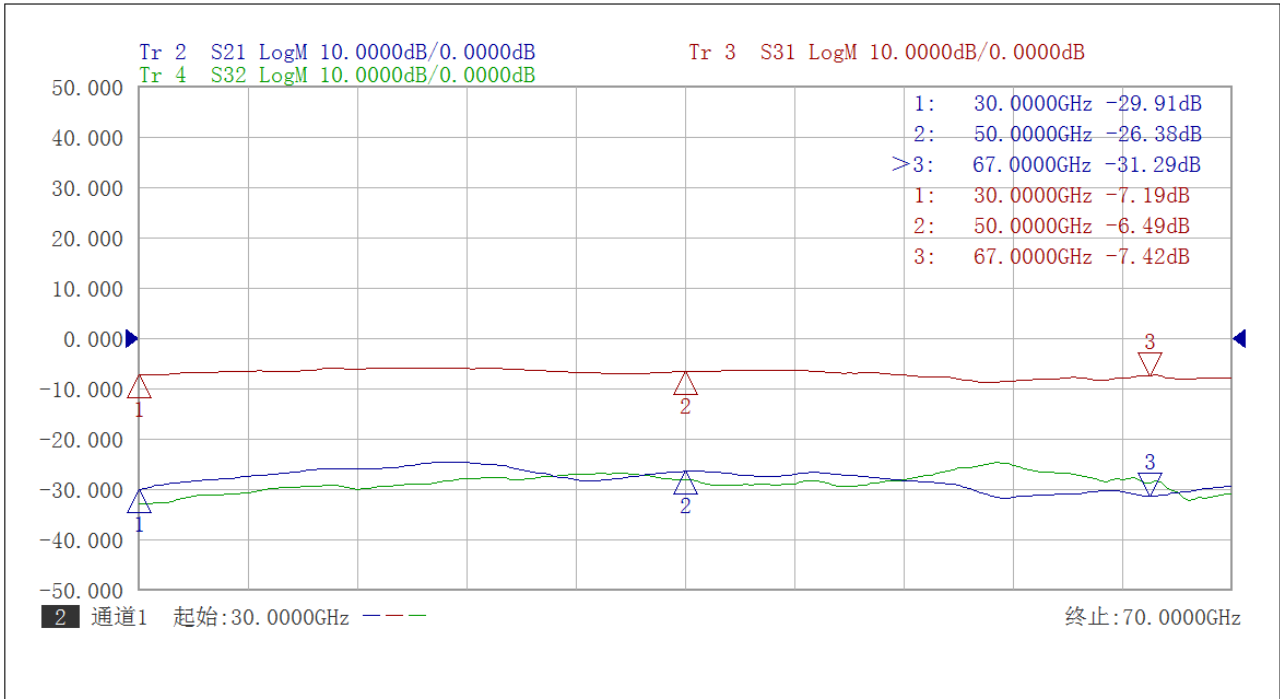
S21 Insertion Loss vs Frequency State1 (RF2 ON, RF3 OFF)



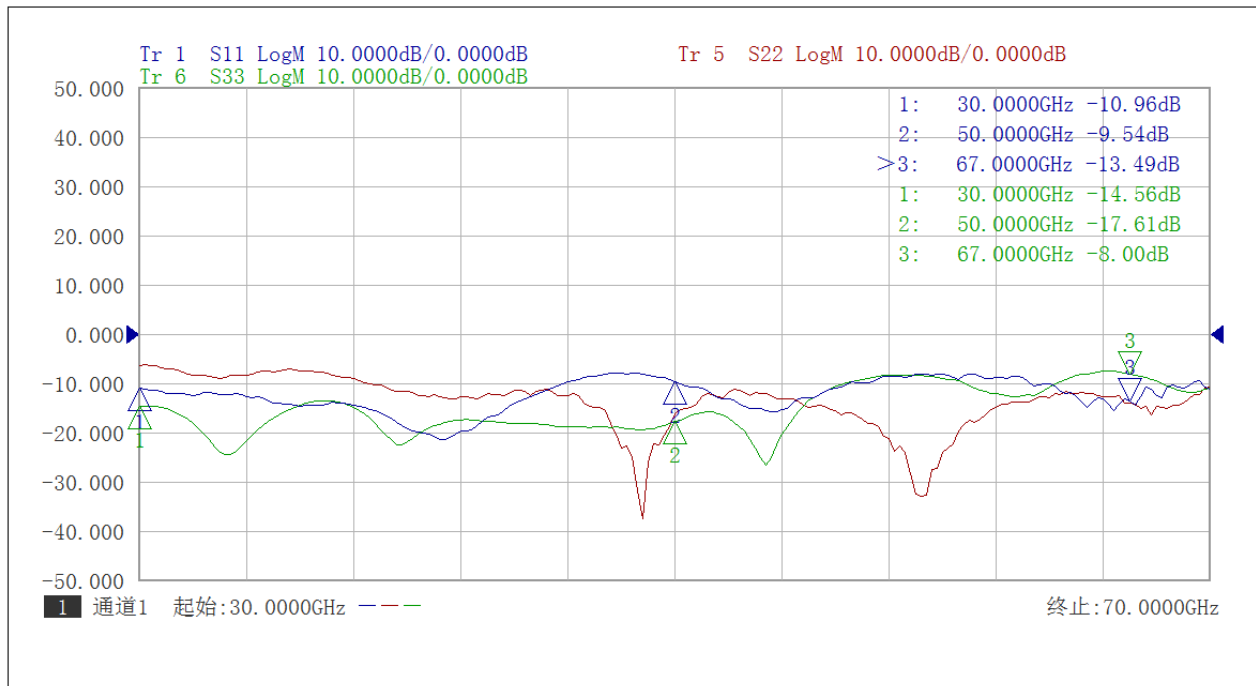
Return Loss vs Frequency State1 (RF2 ON, RF3 OFF)



State 2: RF2 OF, RF3 ON



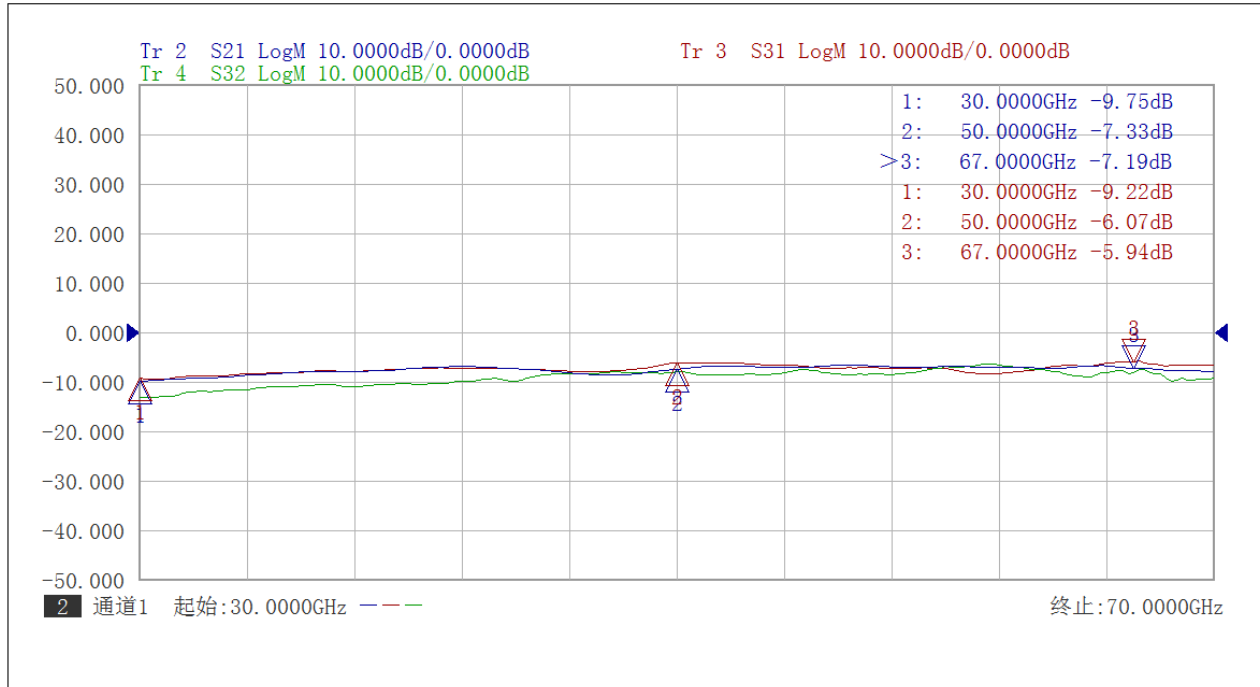
S31 Insertion Loss vs Frequency State2 (RF2 FF, RF3 ON)



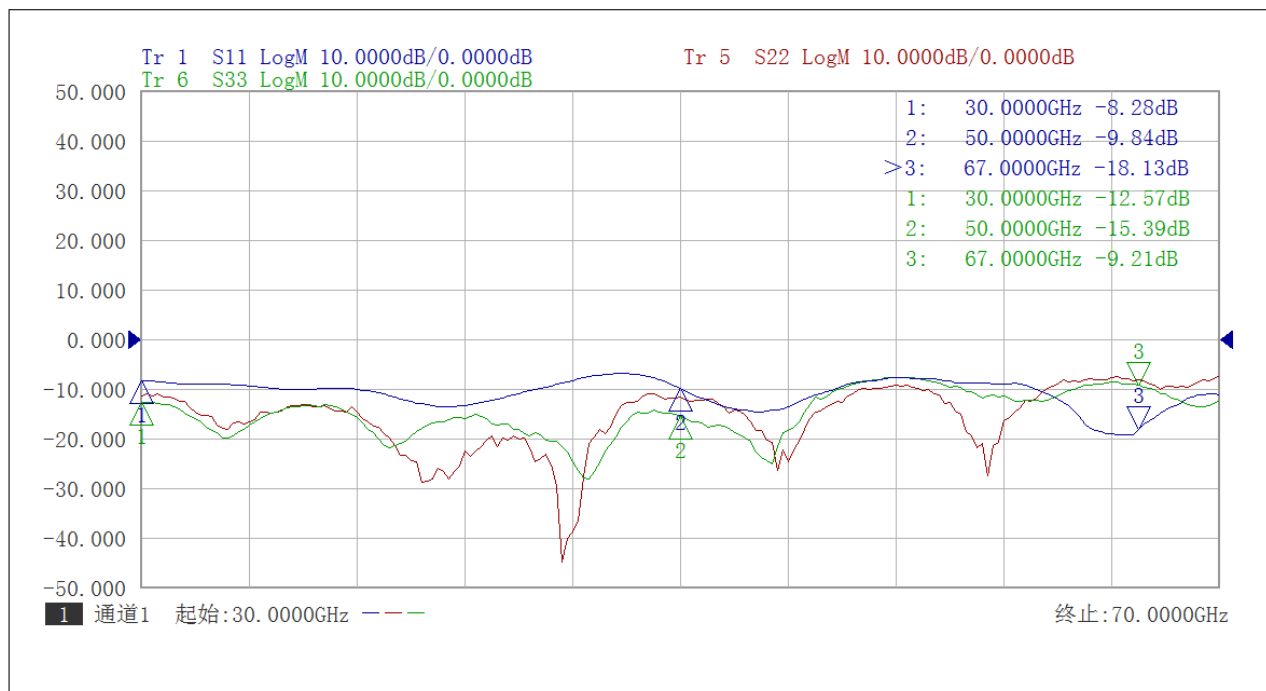
Return Loss vs Frequency State2 (RF2 FF, RF3 ON)



State 3: Both RF2/RF3 ON



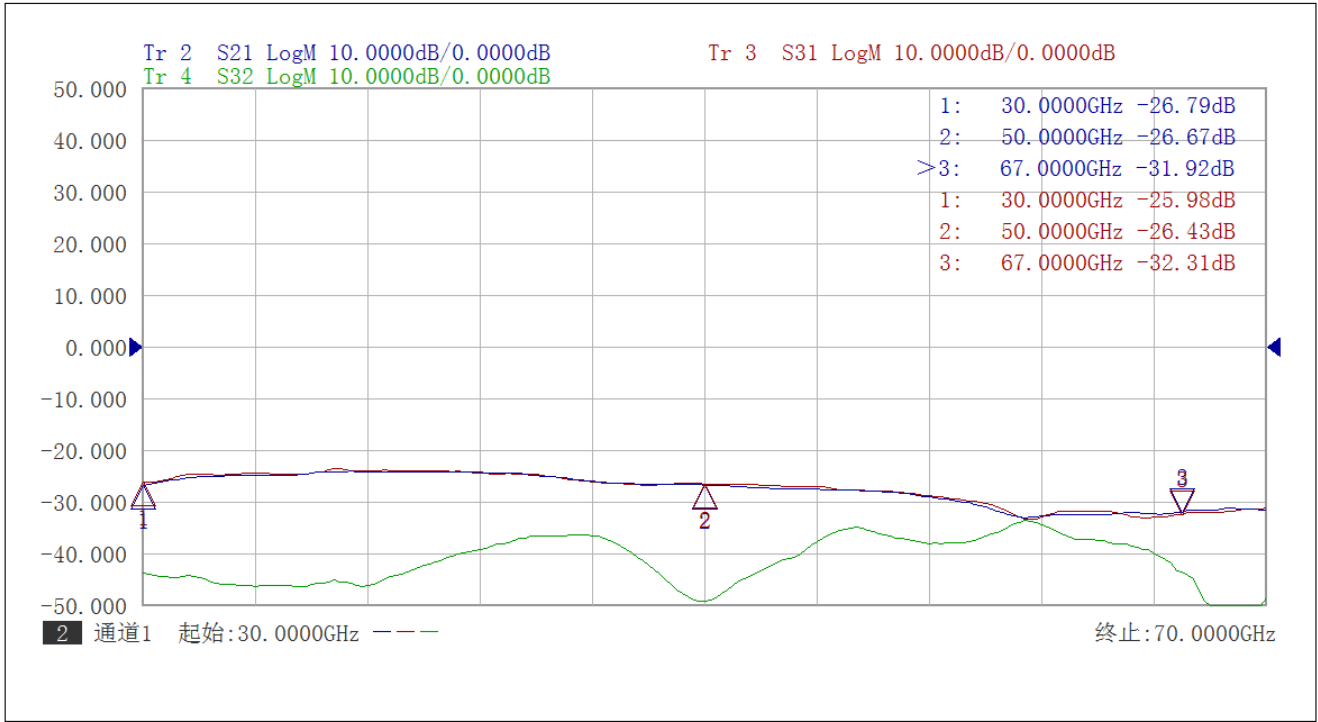
S21/S31 Insertion Loss vs Frequency State3(Both RF2/RF3 ON)



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)



