

### 0.1-40GHz PIN Reflective SP16T Switch, High Power



#### Description:

AT-SP16T-0040XH-R is high power, wide band PIN reflective SP16T switch from 0.1-40GHz. The GaAs Based Pin switch is controlled by TTL with +/-5V power supply. The switch is with good high isolation and good return loss performance.

The modules is with 2.92mm female connector, other connectors can be provided according to request.

More information, visit [www.atmicrowave.com](http://www.atmicrowave.com)

#### Feature

- ✓ Frequency: 0.1-40GHz
- ✓ Low insertion Loss, -8 dB
- ✓ High isolation: -60dBc
- ✓ Very fast speed

#### Application

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

#### Electronical Specifications:

Parameter	Min	Typical	Max
Frequency		0.1-40GHz	
Insertion Loss 0.1-26.5GHz		-5dB	-9dB
Insertion Loss 26.5-40GHz		-12dB	-18dB
Isolation	-25	-40 dB	
Return Loss		-15dB	
Switching Time		100ns	
P1dB @17GHz		+23dBm	
Bias Voltage		+/-5V, 50mA	
Control		TTL	
Spec Temp		25C	





# AT-SP16T-0040XH-R

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## Mechanical Information

Item	Description
Input Port	2.92mm Female
Output Port	2.92mm Female
Bias/Control	Feed Through Pin
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	50g
Size:	See Dimension

## Absolute Maximum Ratings Table

Parameter	Value
Bias Voltage	+5V +/-10%, -5V +/-10%
RF Input Power	+30dBm
Operating Temperature	-40 to +85C
Storage Temperature	-65 to +150C

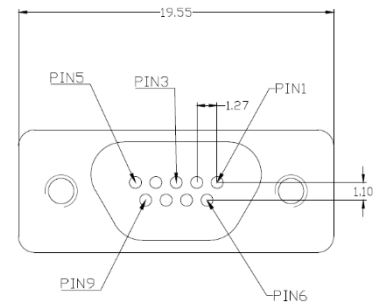
## TTL and Bias Voltage

TTL	V2
High	2.0 to 5.5V
Low	0 to 0.8V
VDD	+5V ( +/-5%)
VEE	-5V ( +/-5%)



### Truth Table

C1	C2	C3	C4	ON
0	0	0	0	J0-J1
0	0	0	1	J0-J2
0	0	1	0	J0-J3
0	0	1	1	J0-J4
0	1	0	0	J0-J5
0	1	0	1	J0-J6
0	1	1	0	J0-J7
0	1	1	1	J0-J8
1	0	0	0	J0-J9
1	0	0	1	J0-J10
1	0	1	0	J0-J11
1	0	1	1	J0-J12
1	1	0	0	J0-J13
1	1	0	1	J0-J14
1	1	1	0	J0-J15
1	1	1	1	J0-J16



### 管脚定义:

- 1: +5V
- 2: -5V
- 3: GND
- 4: C1
- 5: C2
- 6: C3
- 7: C4
- 8: NC
- 9: NC

### 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.

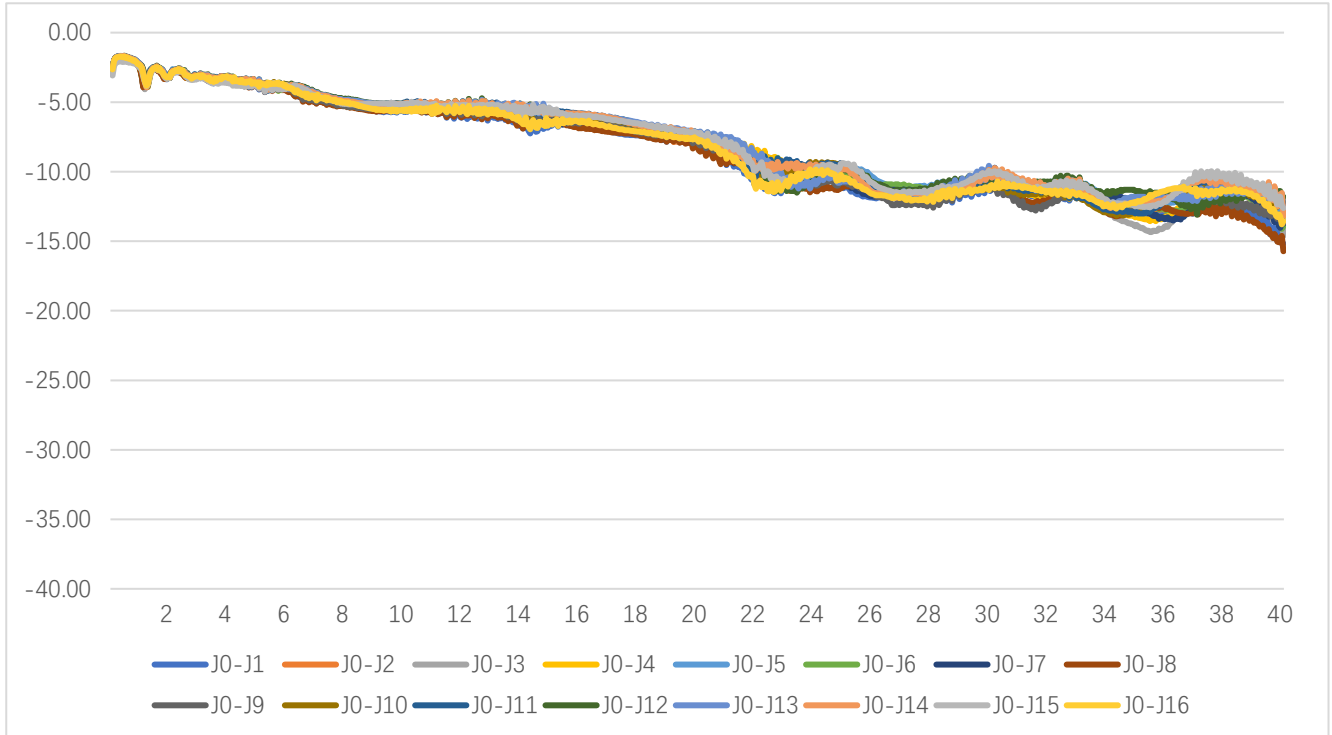




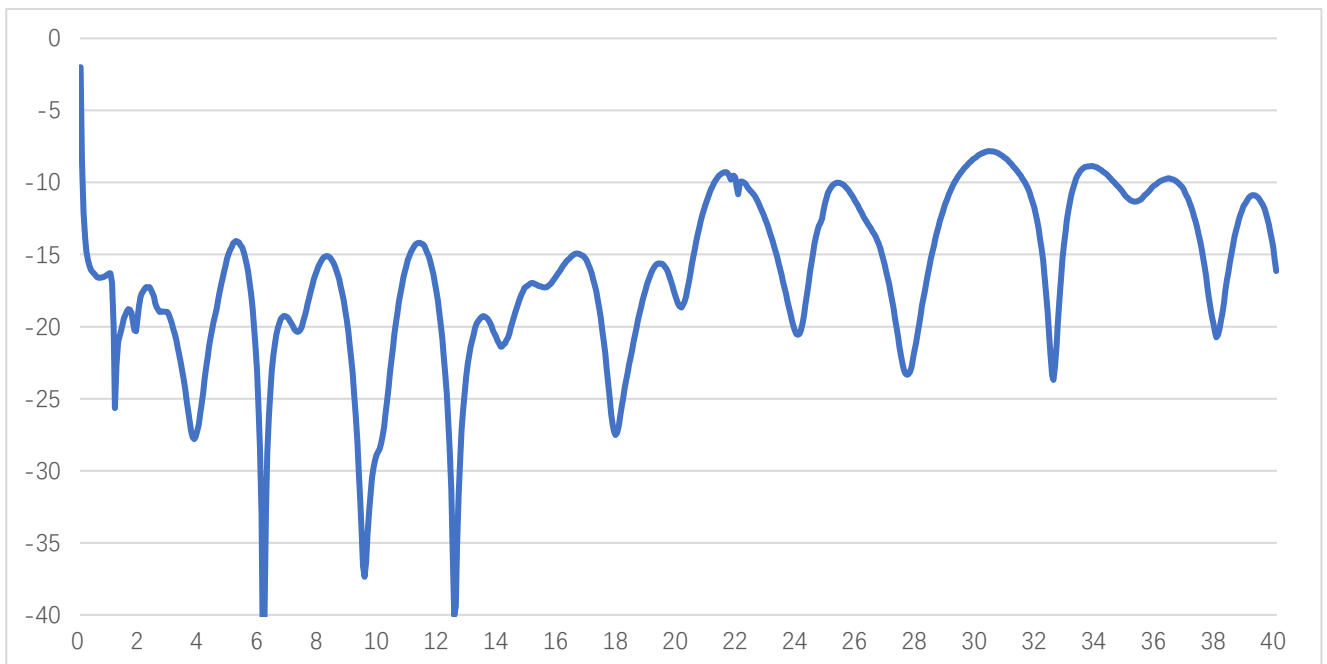
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## Test Data:

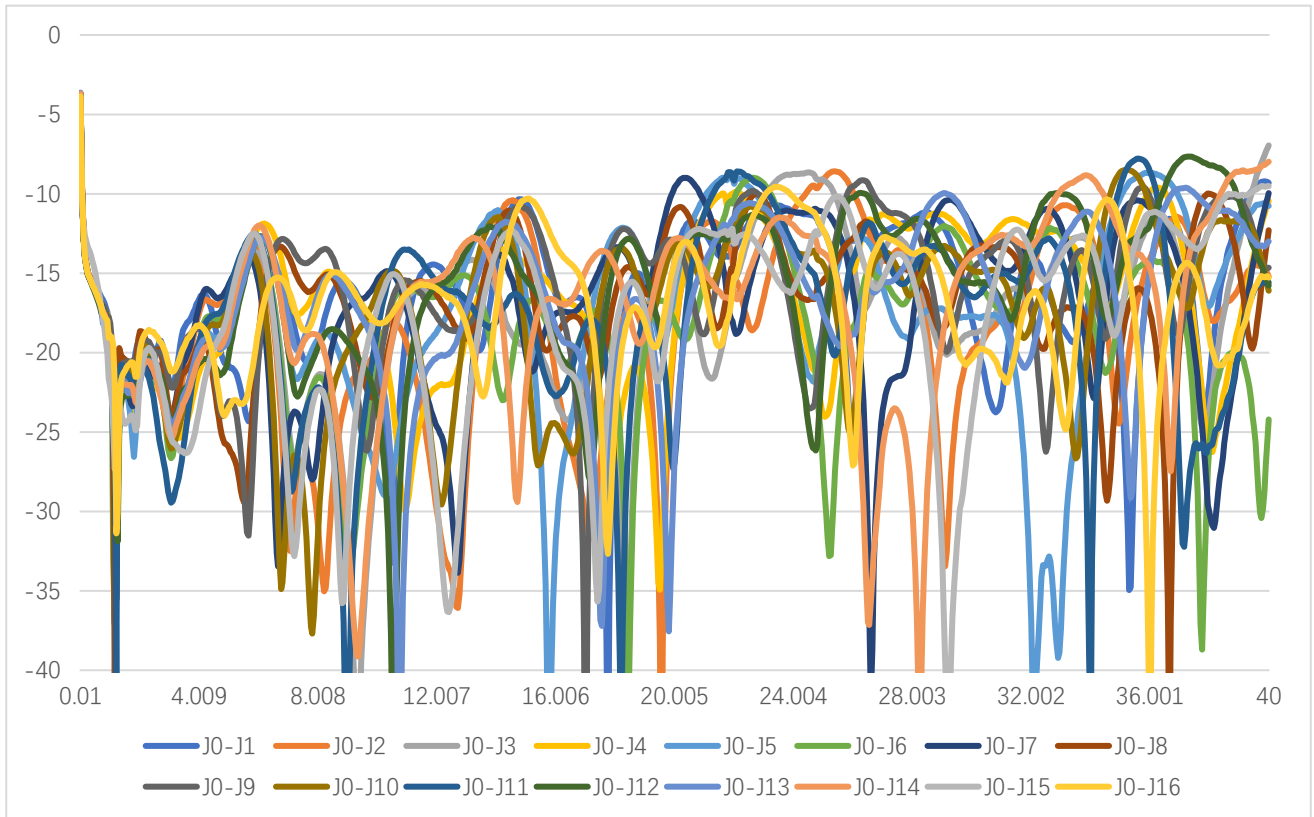


Insertion Loss vs Frequency

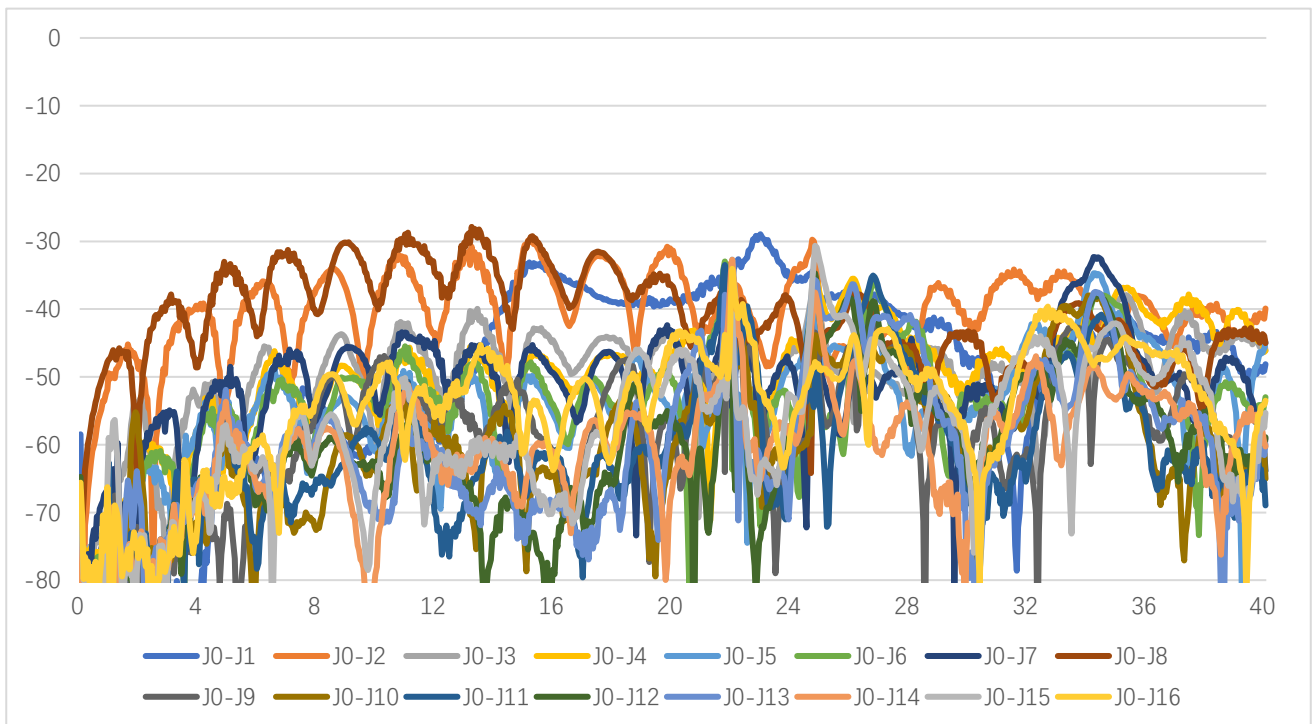


Input Return Loss vs Frequency





Output Return Loss vs Frequency



Isolation vs Frequency



## Dimension (mm)

