泰莱微波
Talent Microwave

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Model:TLSP16T0.4G18GA-PM

Absorptive,Broadband PIN Switch 0.4-18 GHz,SP16T,SMA

Feature:

- Ultra Wide Band: 0.4-18 GHz
- Low Insertion Loss: 7.5 dB
- Power Handling : 24 dBm
- High Isolation
- Switch Type:Absorptive

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range		0.4-18		GHz
Insertion Loss		7.5	8.5	dB
Isolation	55	60		dB
Switch Speed		50	100	ns
Input VSWR		1.5	2.2	:1
Output VSWR		1.5	2.2	:1
Power Handling			27	dBm
Repetitive amplitude switching consistency			0.01	dB
Repetitive phase switching consistency			0.1	°
Maximum service life	5 million			cycles
Control Logic TTL		0/+3.3		V DC
DC Voltage		+5		V DC
DC Supply Current		600		mA
Switch type		Absorptive		
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/ SMA Female	
Control Bias	J30J-9ZKP	1~4:C1~C4; 6~7:+5V; 5,8,9: GND;
Size	70.45*70.15*22.9	mm
Weight	/	g

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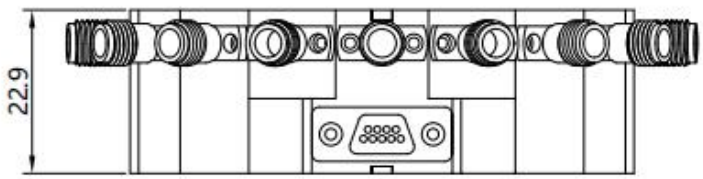
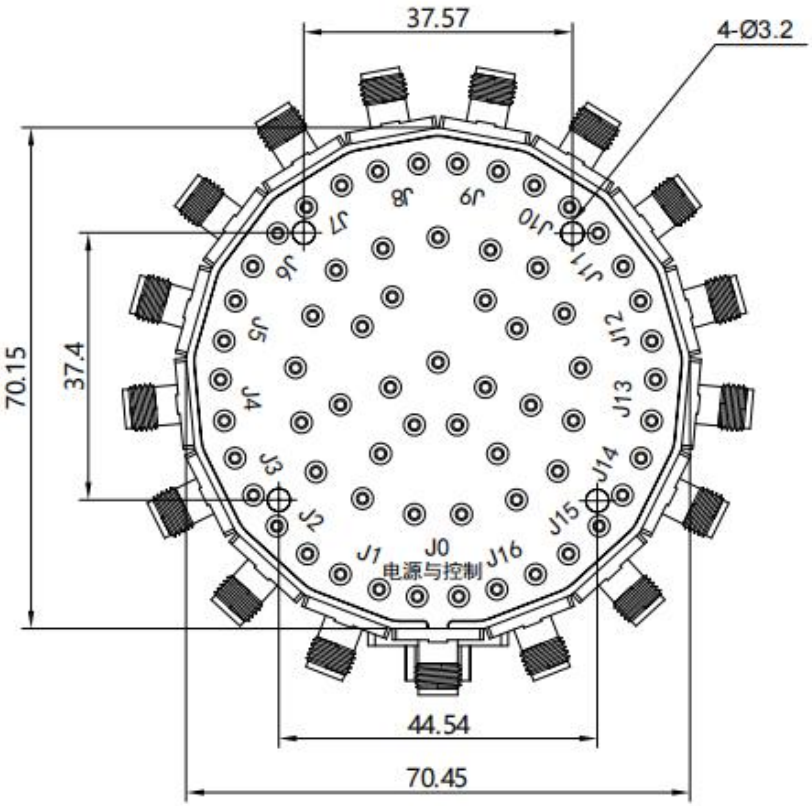
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	±5%
RF Input Power	27 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm





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Truth Table:

Truth Table				
TTL Control Input				Signal Path State
C4	C3	C2	C1	
0	0	0	0	J0-J1
1	0	0	0	J0-J2
0	1	0	0	J0-J3
1	1	0	0	J0-J4
0	0	1	0	J0-J5
1	0	1	0	J0-J6
0	1	1	0	J0-J7
1	1	1	0	J0-J8

Truth Table				
TTL Control Input				Signal Path State
C4	C3	C2	C1	
0	0	0	1	J0-J9
1	0	0	1	J0-J10
0	1	0	1	J0-J11
1	1	0	1	J0-J12
0	0	1	1	J0-J13
1	0	1	1	J0-J14
0	1	1	1	J0-J15
1	1	1	1	J0-J16

TTL Control Voltages &VDD	
Stage	Bias Condition
VDD	+5V (±5%)
Low（0）	0 to 0.8Vdc
High（1）	2.0 to +5.0Vdc

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-25		+85	℃
Non-operating Temperature	-55		+125	℃
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TLSP16T0.4G18GA-PM	Absorptive,Broadband PIN Switch 0.4-18 GHz,SP16T,SMA	Rev.1.1

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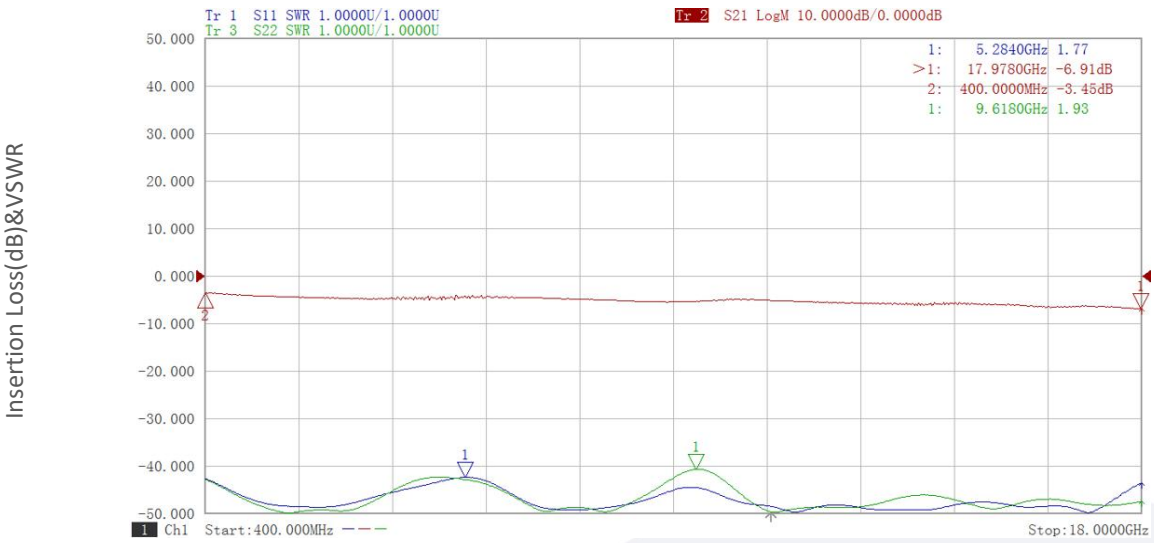
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J1:

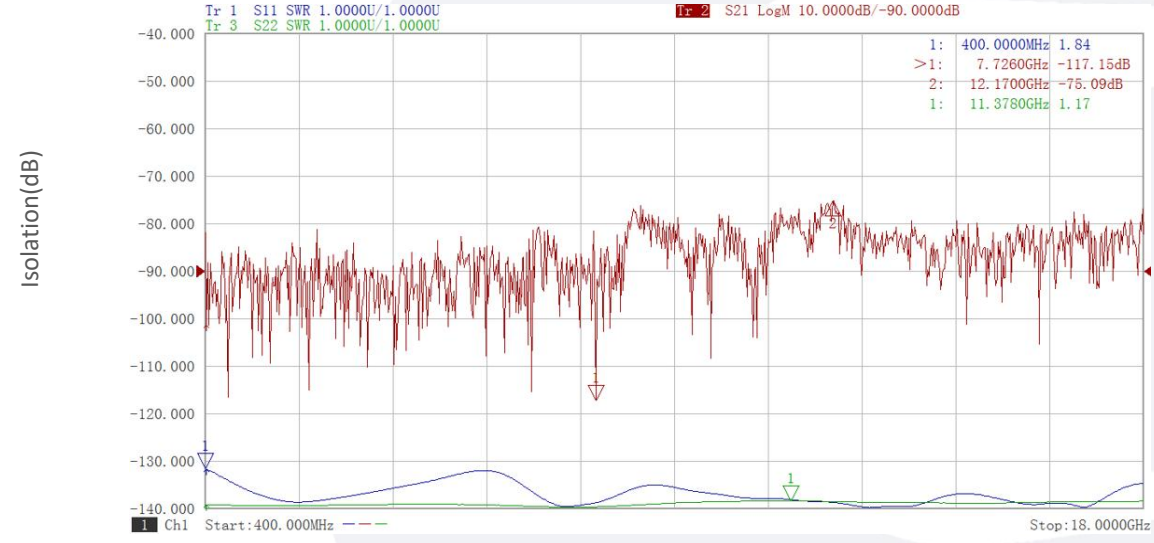


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J1:



Isolation(dB)

Frequency(GHz)

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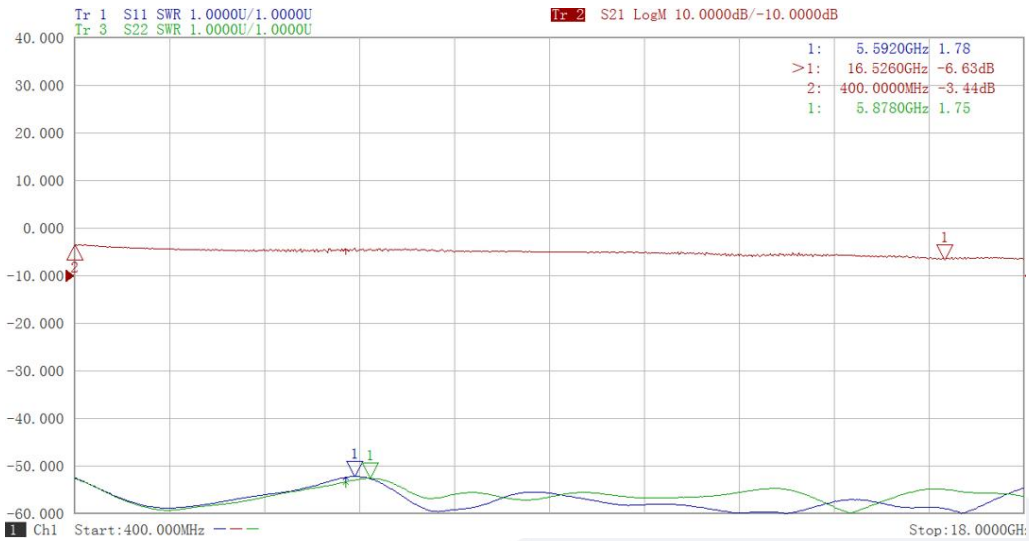
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J2:

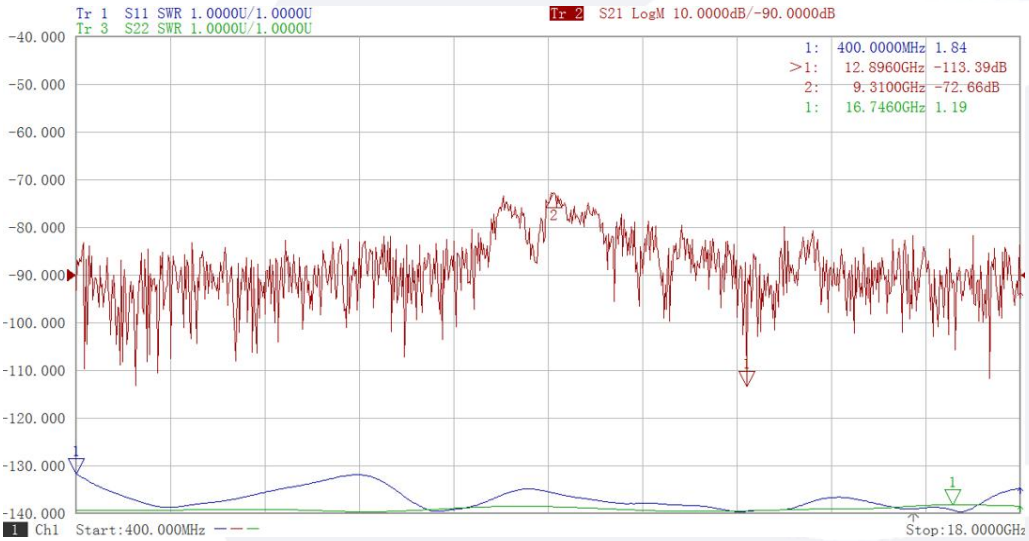


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J2:



Isolation(dB)

Frequency(GHz)

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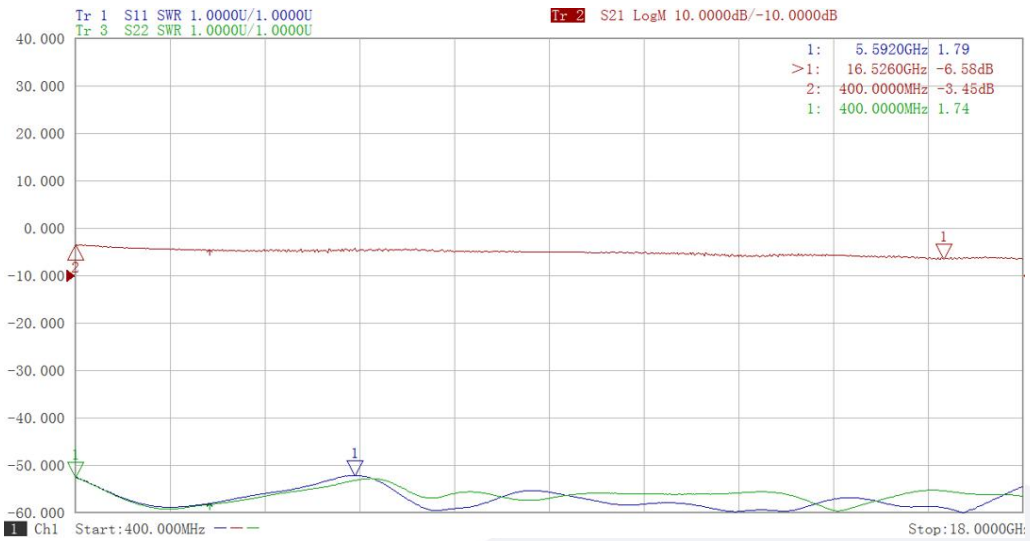
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J3:

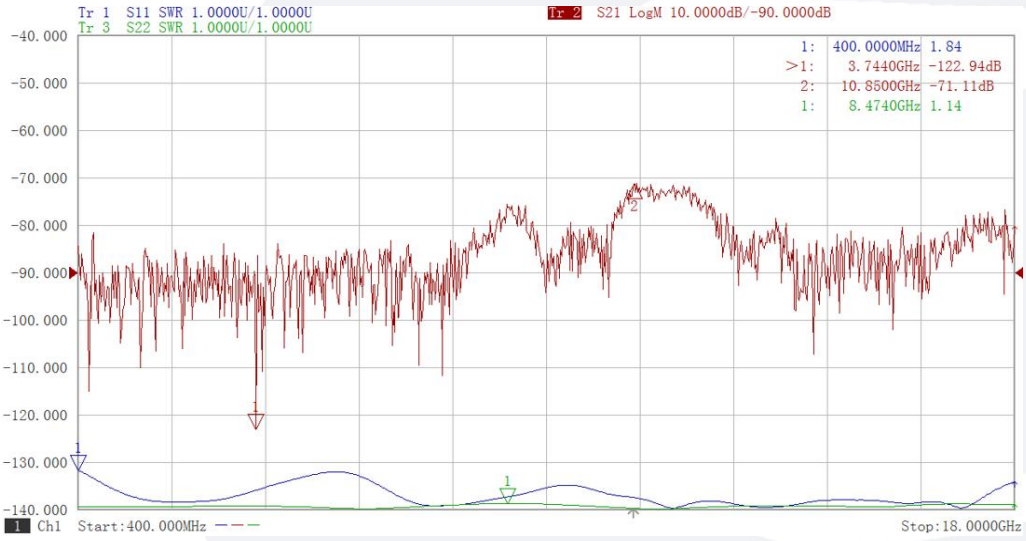


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J3:



Isolation(dB)

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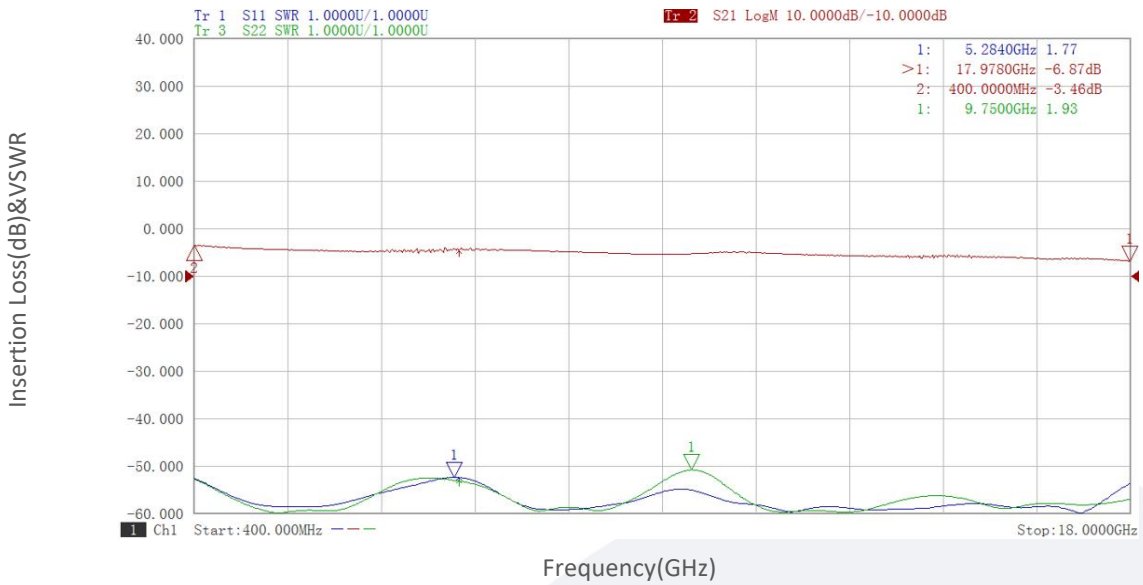
Typical Performance Data:

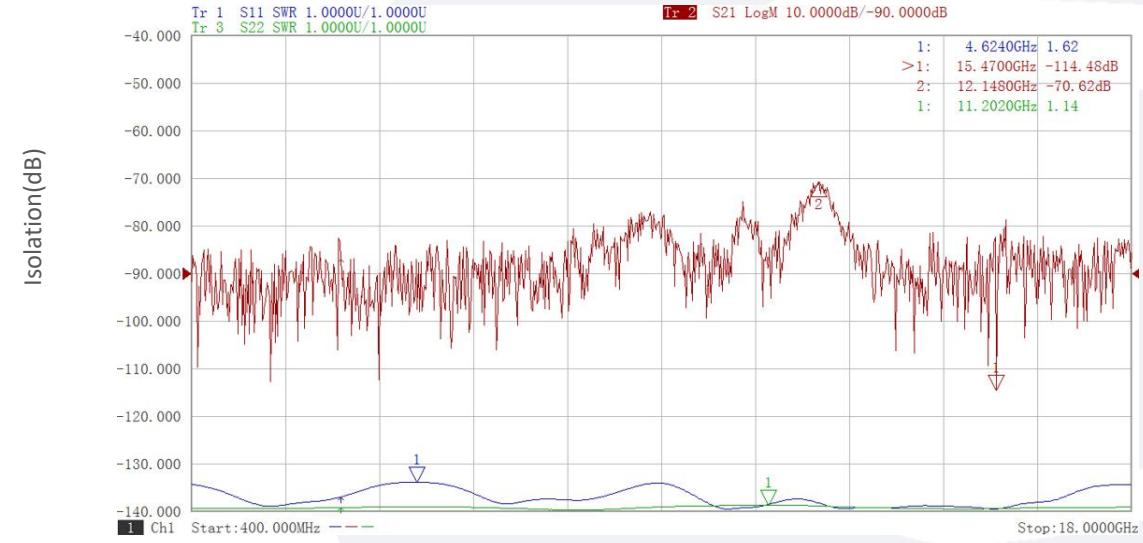
Insertion Loss&VSWR vs Frequency

J0-J4:



Isolation vs Frequency

J0-J4:



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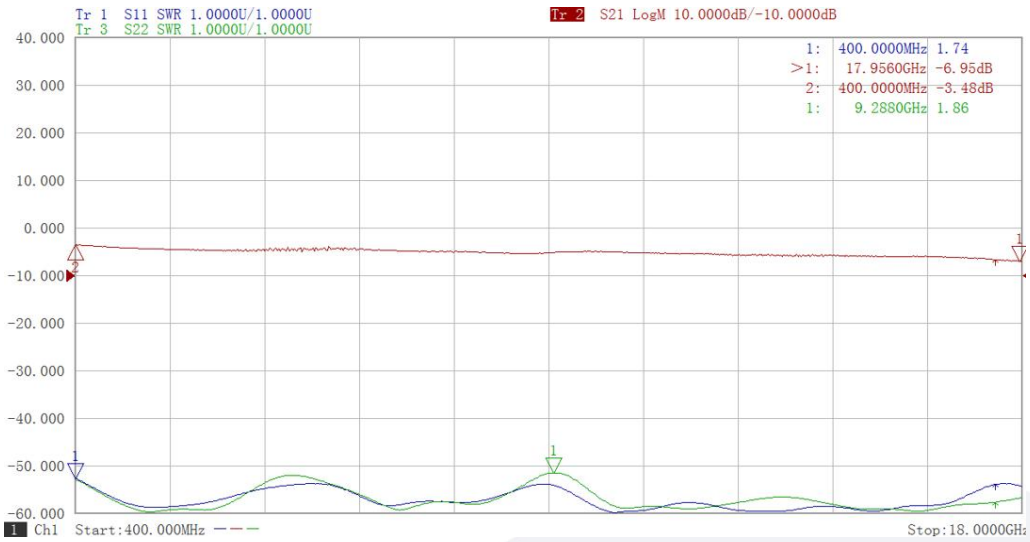
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J5:

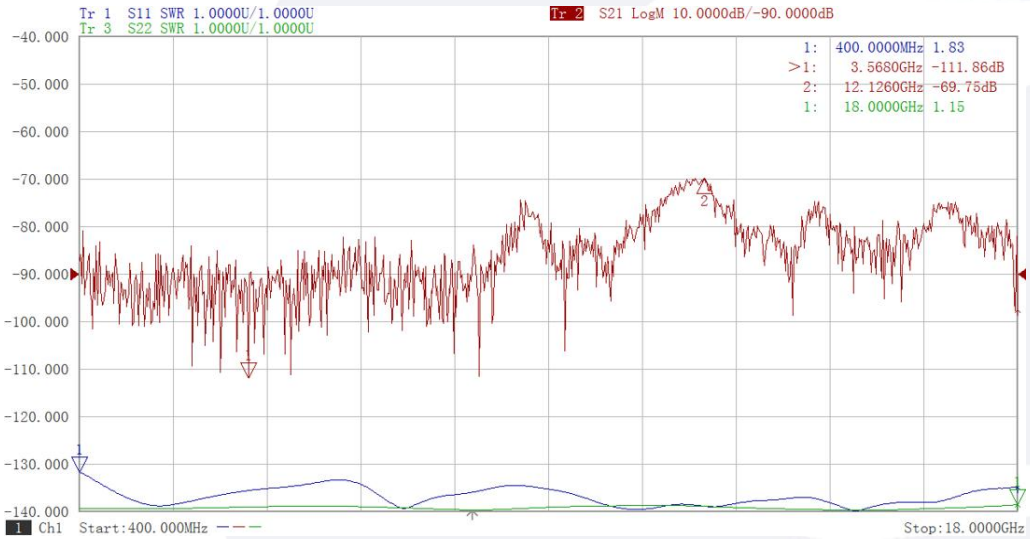


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J5:



Isolation(dB)

Frequency(GHz)

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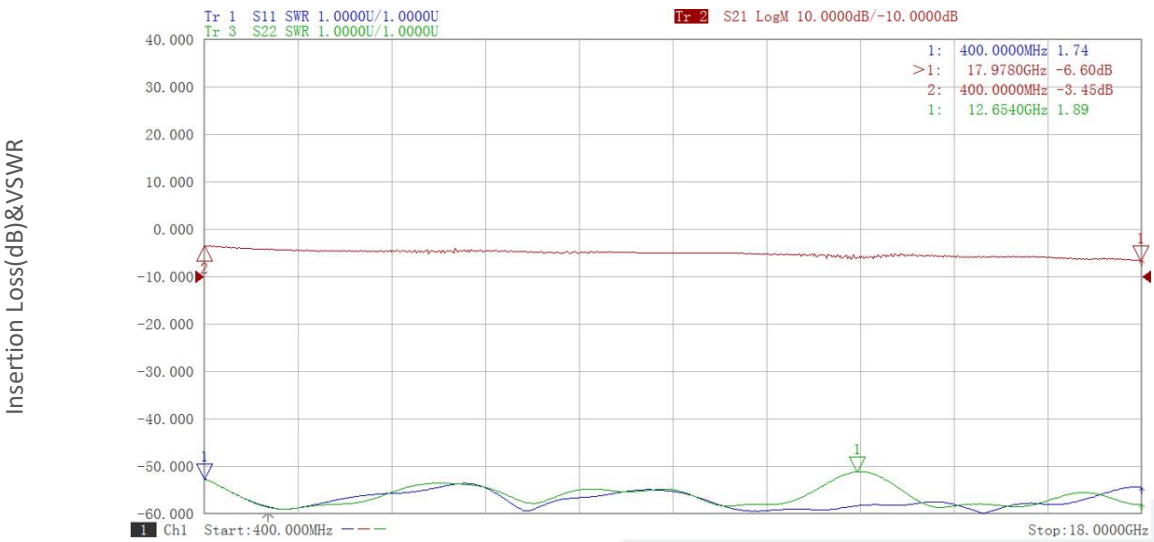
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J6:

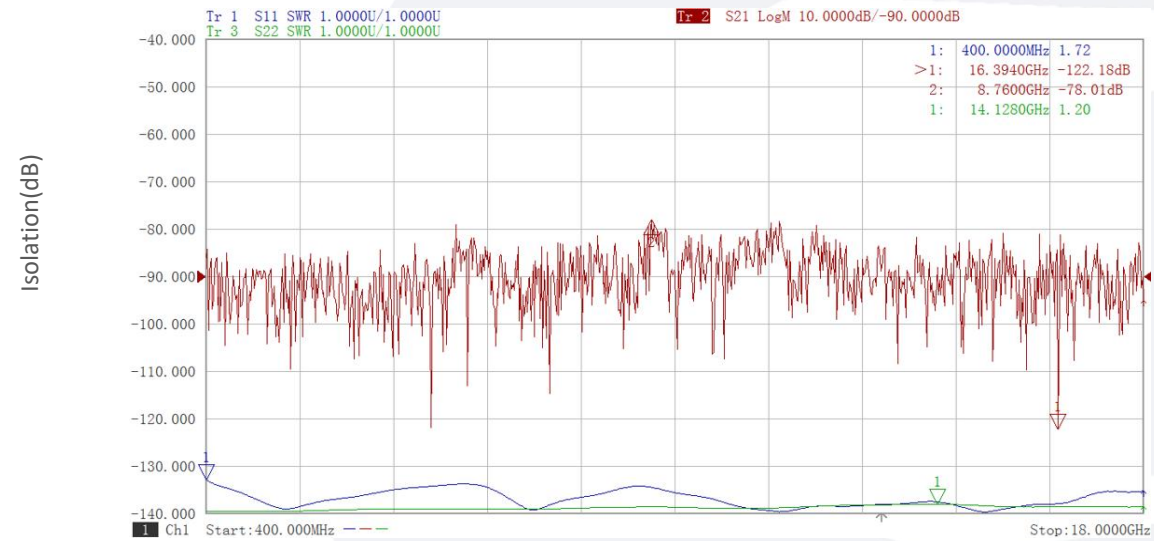


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J6:



Isolation(dB)

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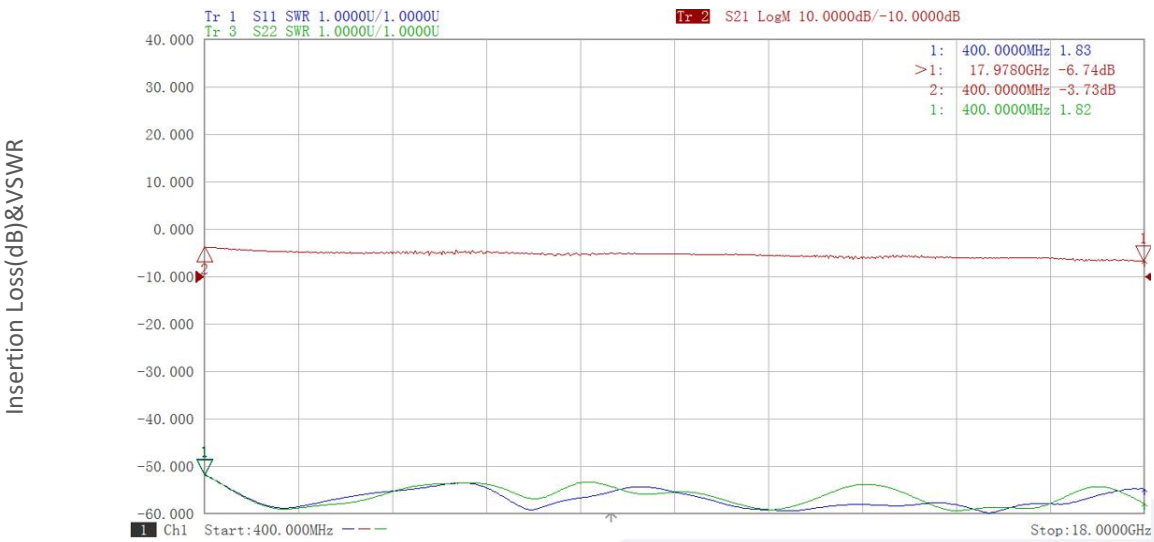
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J7:

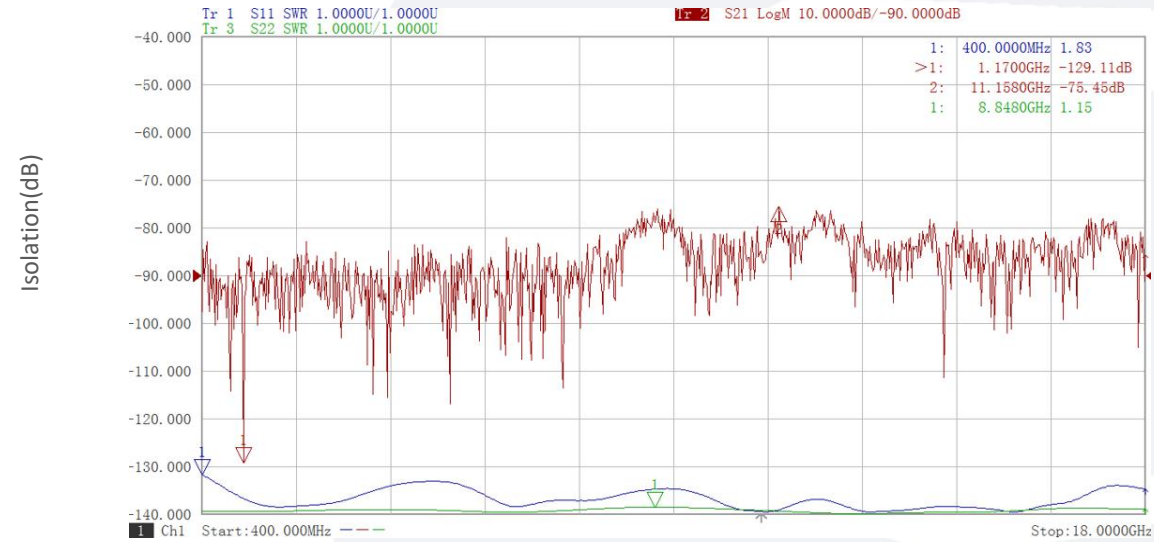


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J7:



Isolation(dB)

Frequency(GHz)

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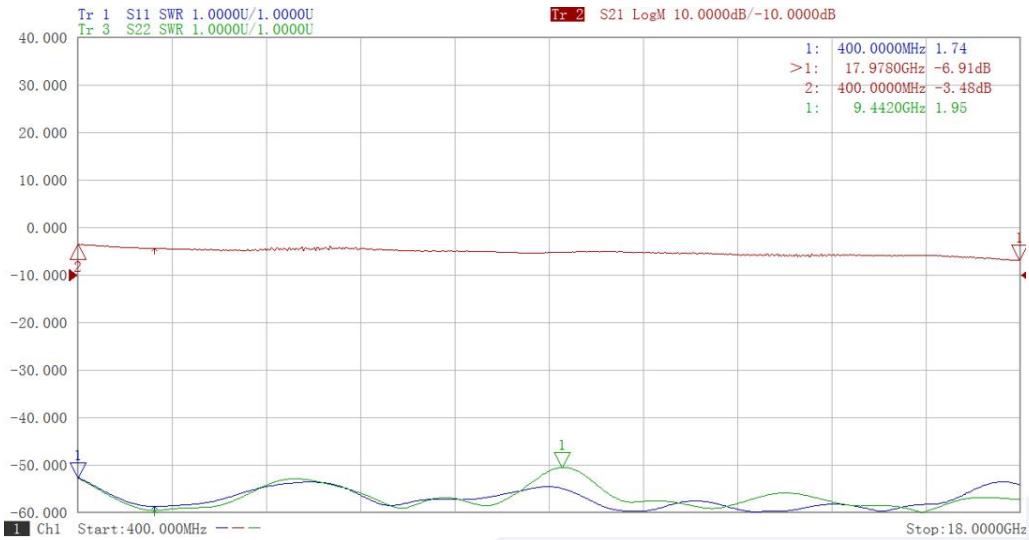
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J8:

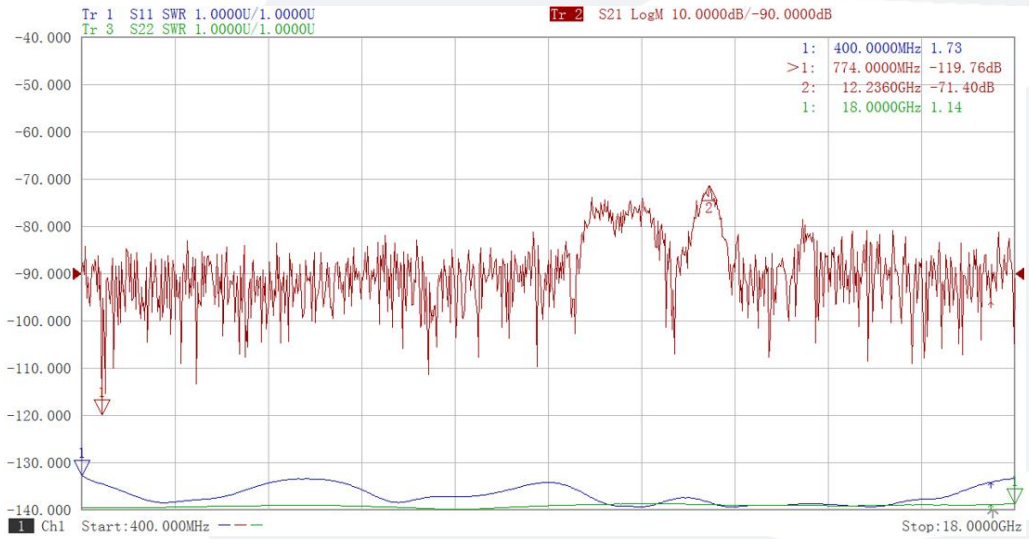


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J8:



Isolation(dB)

Frequency(GHz)

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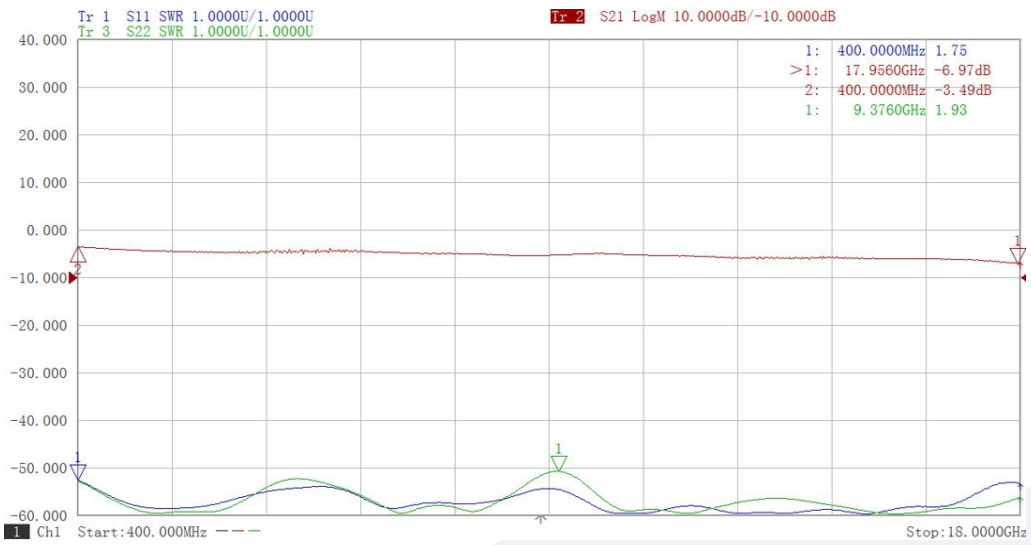
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J9:

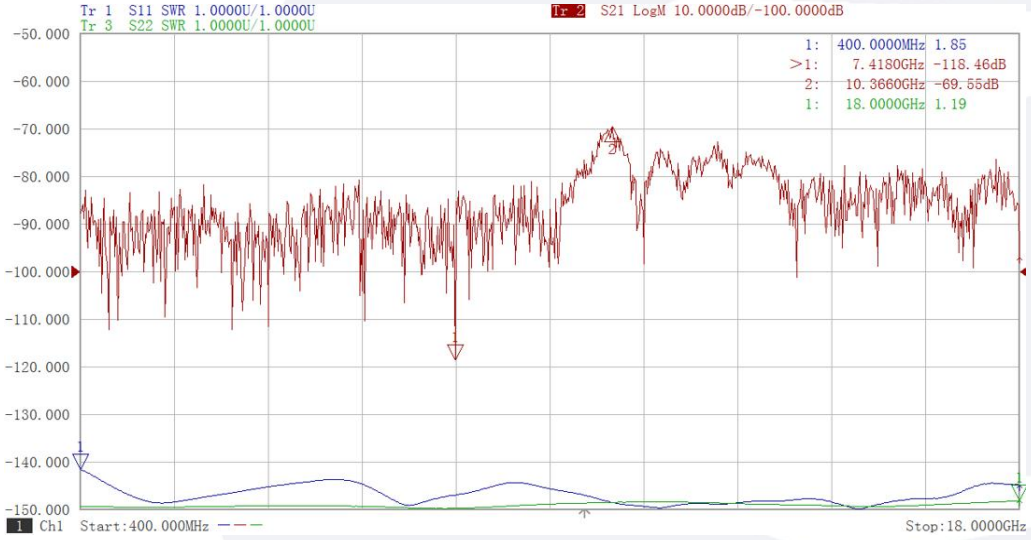


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J9:



Isolation(dB)

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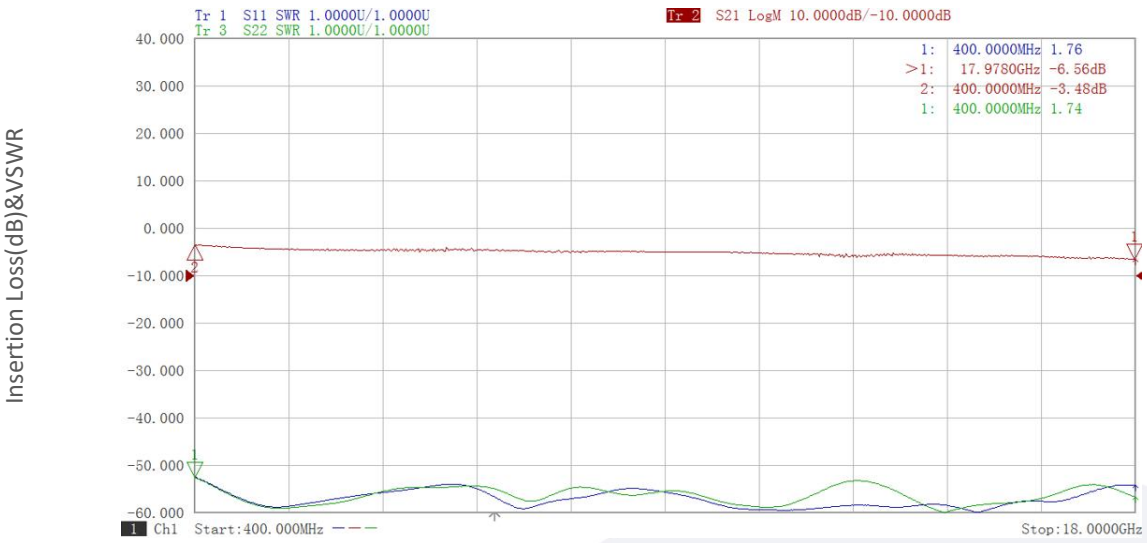
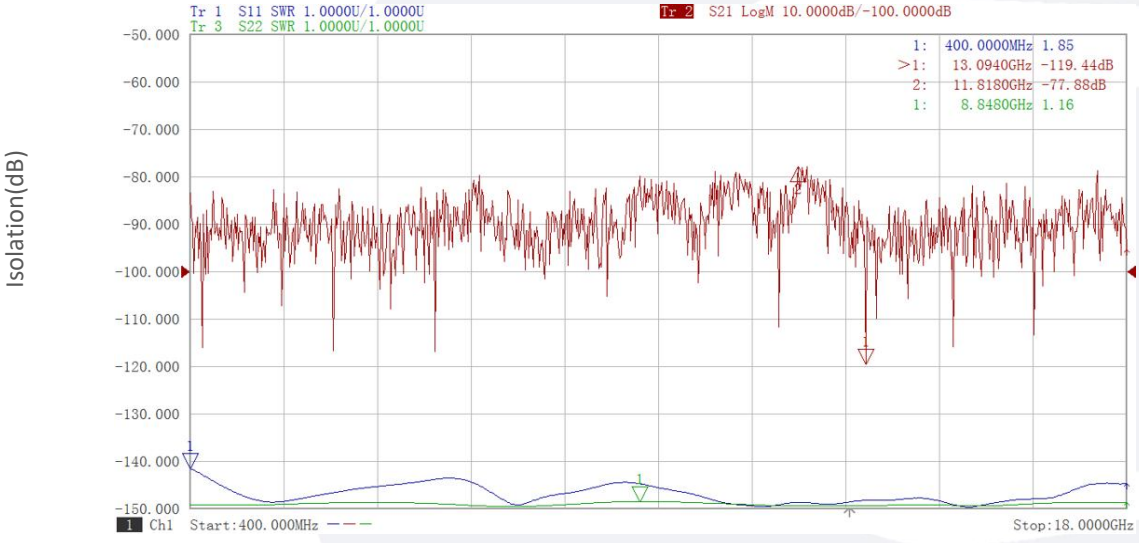
Insertion Loss&VSWR vs Frequency

J0-J10:



Isolation vs Frequency

J0-J10:



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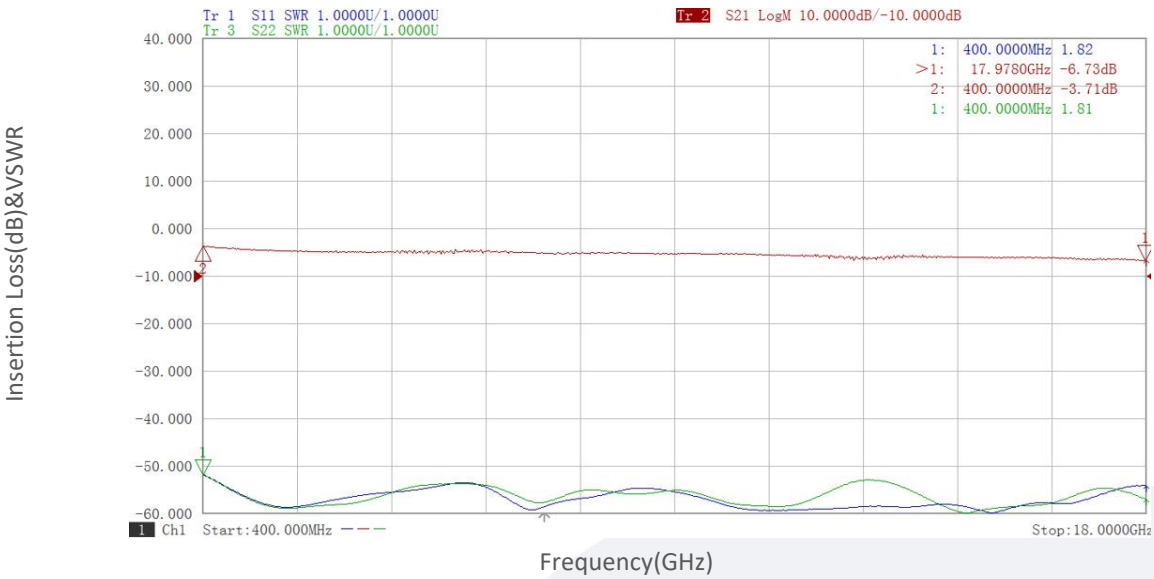
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J11:

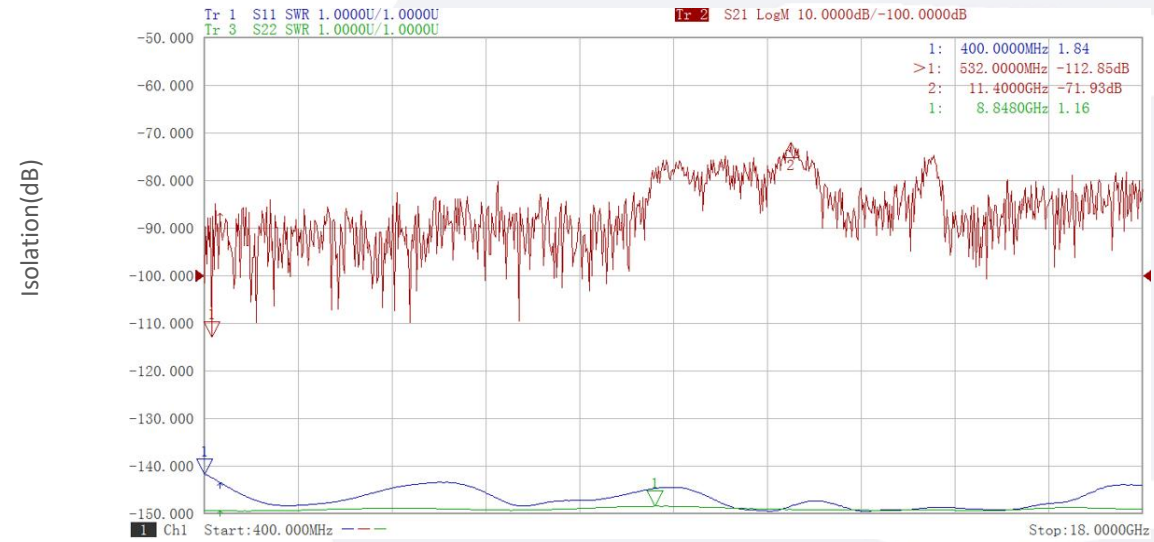


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J11:



Isolation(dB)

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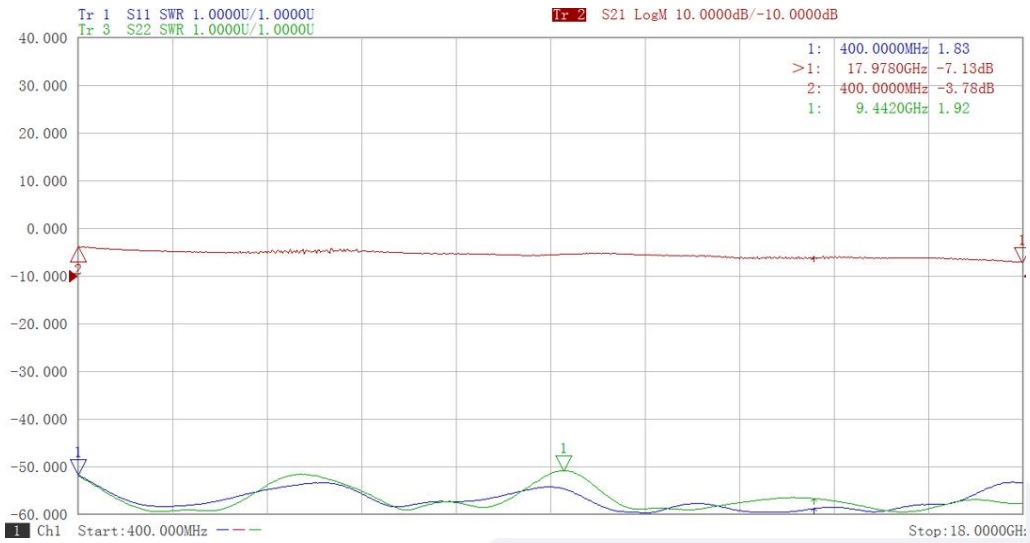
Typical Performance Data:

Insertion Loss&VSWR vs Frequency

J0-J12:

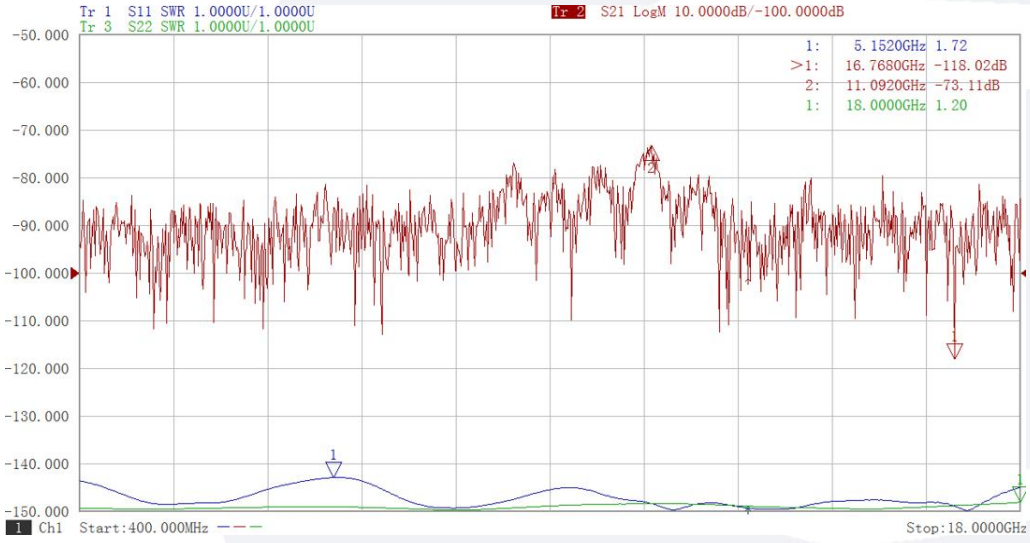


Insertion Loss(dB)&VSWR

Frequency(GHz)

Isolation vs Frequency

J0-J12:



Isolation(dB)

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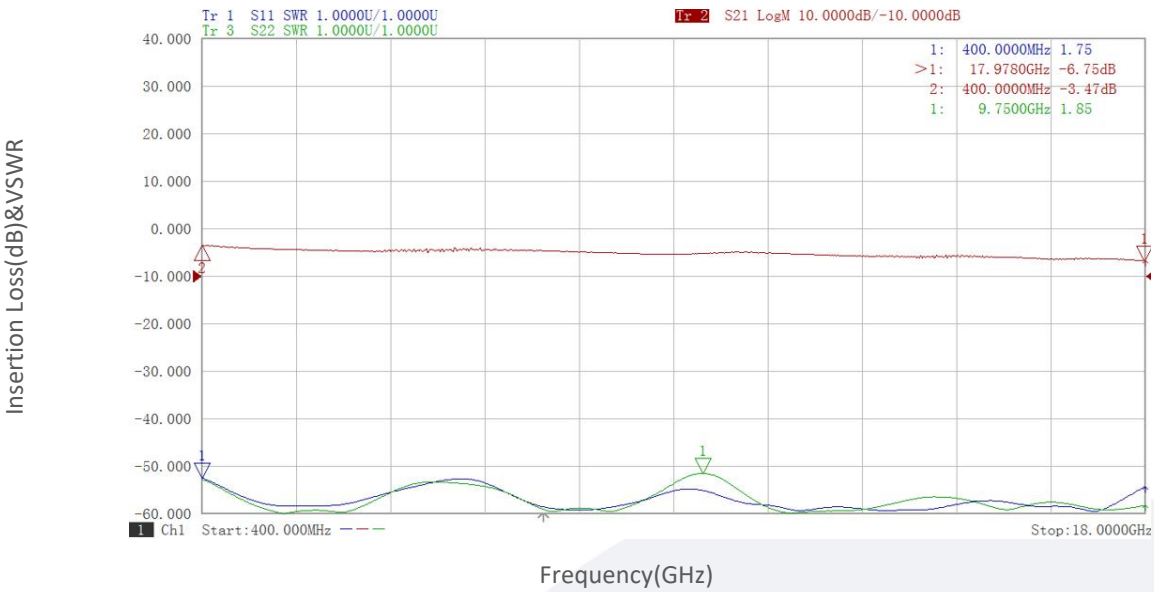
Typical Performance Data:

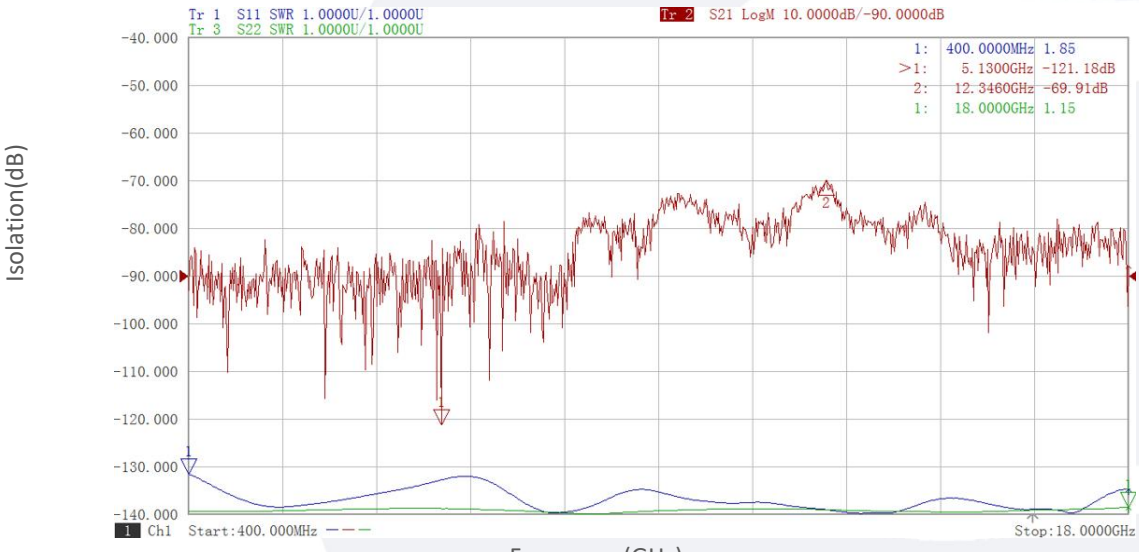
Insertion Loss&VSWR vs Frequency

J0-J13:



Isolation vs Frequency

J0-J13:



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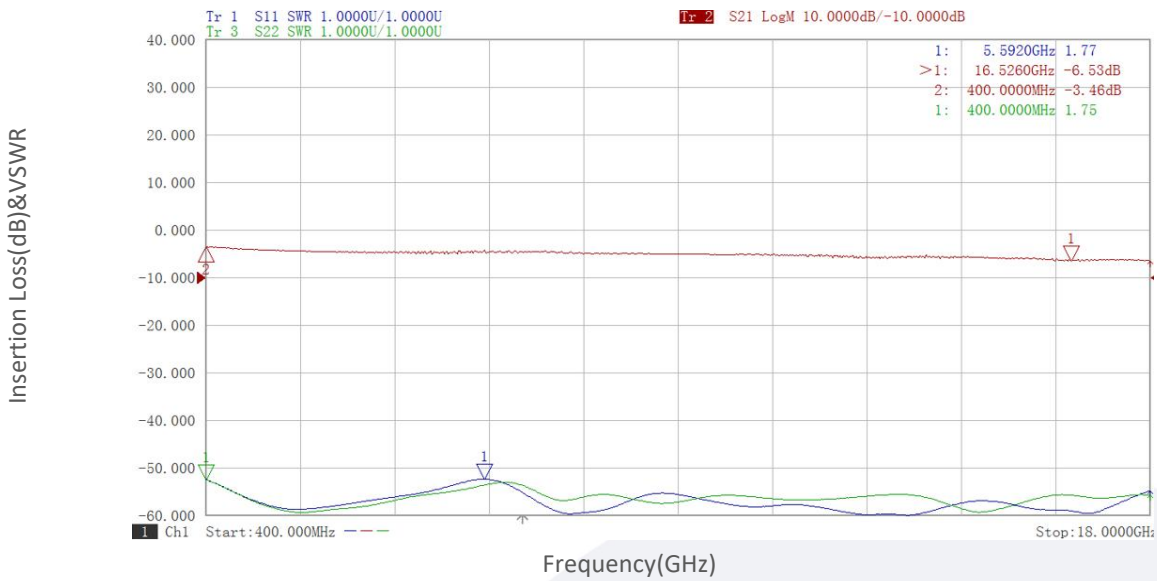
Typical Performance Data:

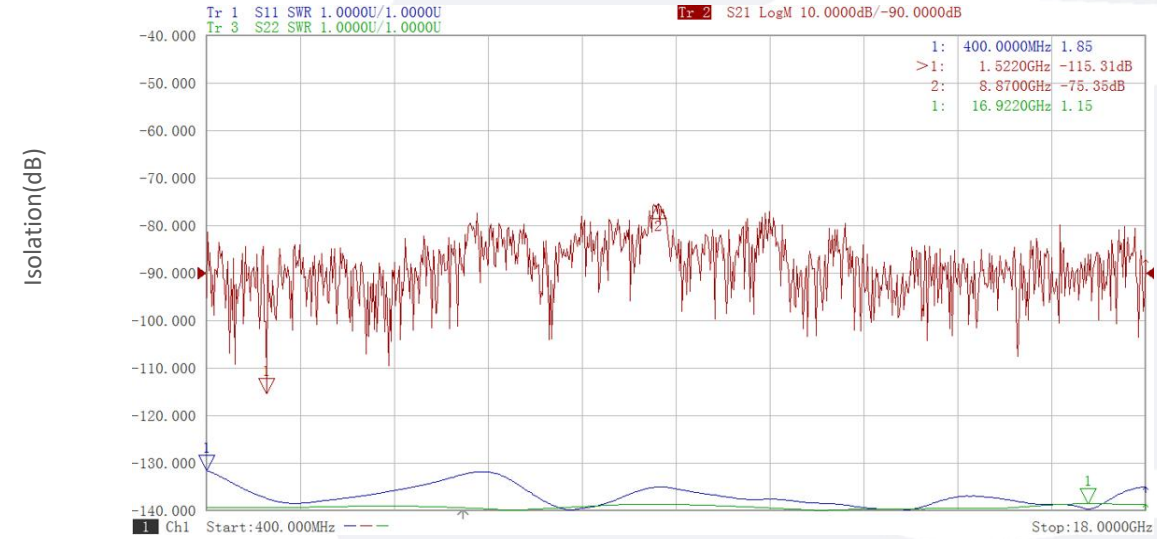
Insertion Loss&VSWR vs Frequency

J0-J14:



Isolation vs Frequency

J0-J14:



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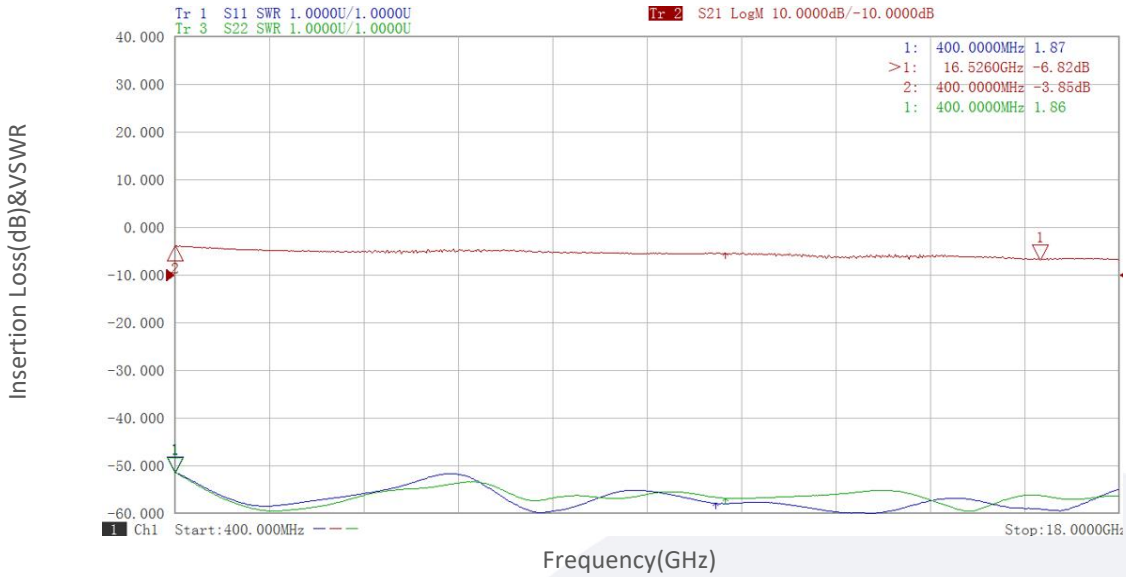
Typical Performance Data:

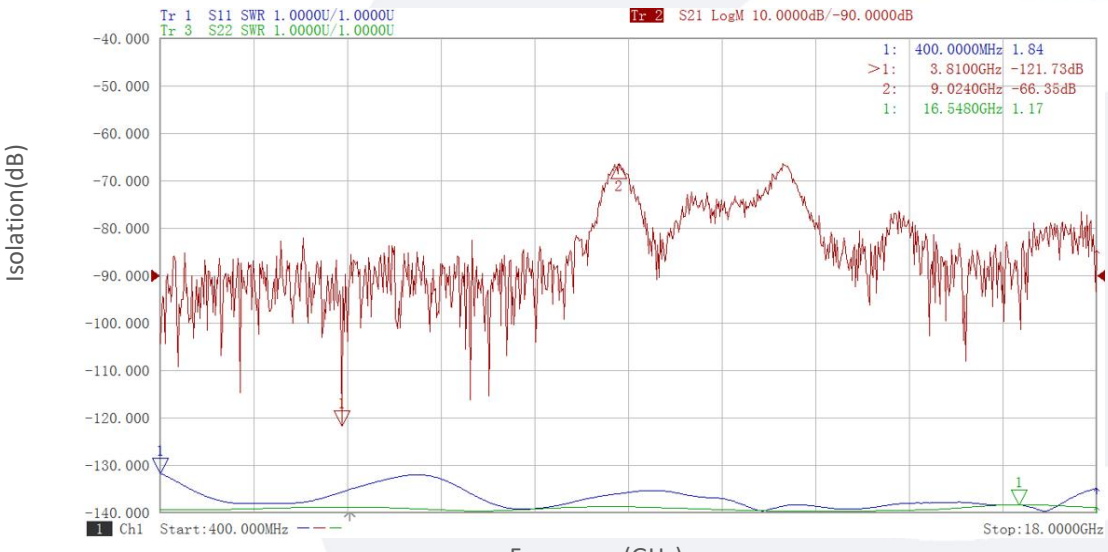
Insertion Loss&VSWR vs Frequency

J0-J15:



Isolation vs Frequency

J0-J15:



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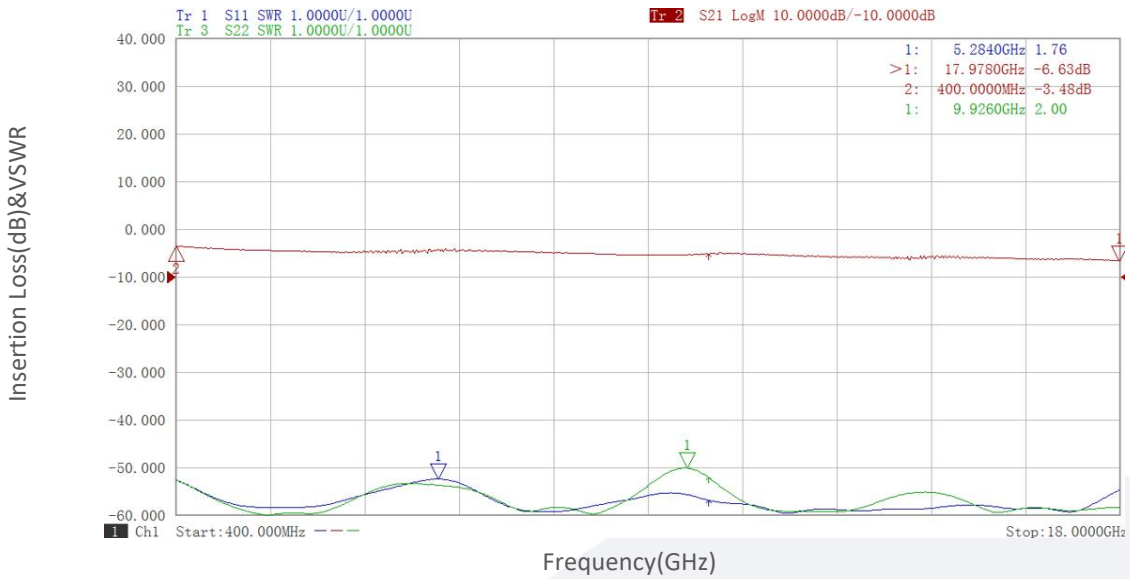
Typical Performance Data:

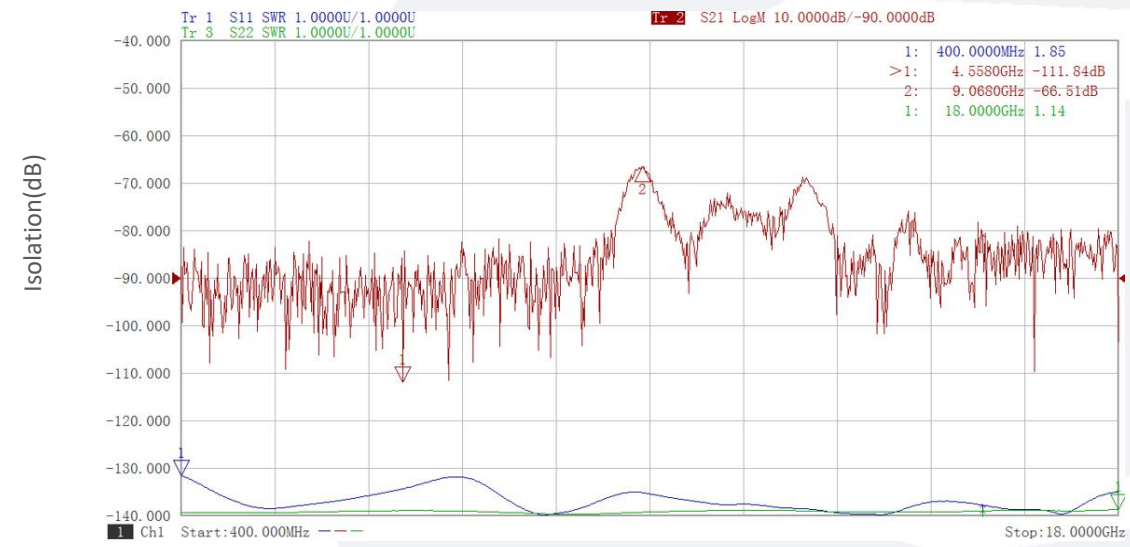
Insertion Loss&VSWR vs Frequency

J0-J16:



Isolation vs Frequency

J0-J16:



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