Reflective Coaxial SP5T Switch 16- 48GHz

Features

- Wide Band Operation 16-48GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Customization available upon request

Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

Parameters	Min.	Typ.	Max.	Units
Frequency Range		16-48		GHz
Insertion Loss		7.5	8.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	50	55		dB
Input VSWR		2.5	2.8	: 1
Output VSWR		2.5	2.8	: 1
RF Input Power			23	dBm
DC Power Dissipation		0.55		W
0.1dB Compression Point (P0.1dB)		23		dBm
IIP3		50		dBm
Switching Speed			50	ns
Weight		2.12		Ounces
Impedance		50		Ω
Biasing(+5V/-5V)		240/50		mA
Input / Output Connectors		2.4mm-Female		
Finish		Gold Plated		
Material		Aluminum		
Sealing		Hermetically Sealed (optional)		

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Absolute Maximum Ratings

Biasing	+5V±10%/-5V±10%

Environmental Specifications

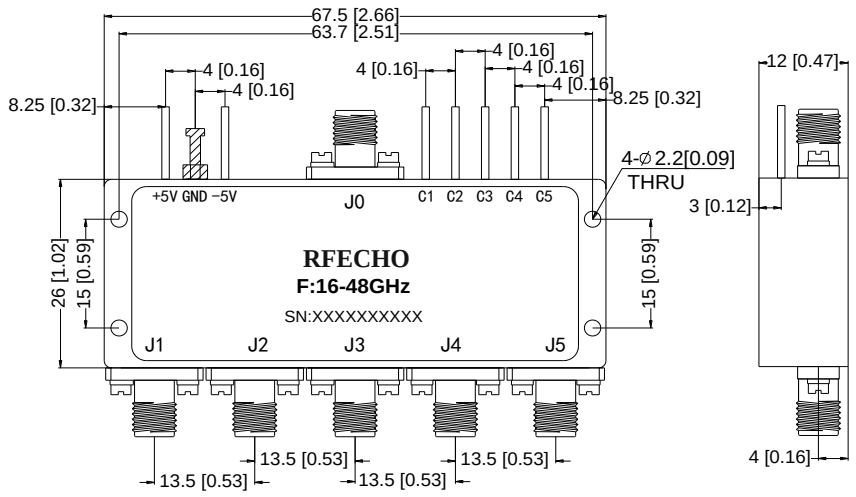
Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH at 40ºc
Shock	20G for 11msec half sine wave,3 axis both directions

Ordering Information

Part No.	Description
DBSA0516004800A	SP5T 16-48GHz PIN Diode Switch

Outline Drawing:

All Dimensions in mm（inches）



Truth Table

TTL Control Voltage THRESHOLD					Low(0)=0~0.8V
					High(1)=2.8~5V
Control Input TTL					Signal Path State
C5	C4	C3	C2	C1	
0	0	0	0	0	OFF
0	0	0	0	1	J0-J1
0	0	0	1	0	J0-J2
0	0	1	0	0	J0-J3
0	1	0	0	0	J0-J4
1	0	0	0	0	J0-J5
1	1	1	1	1	Not Used
Control Pin Customization available upon request					

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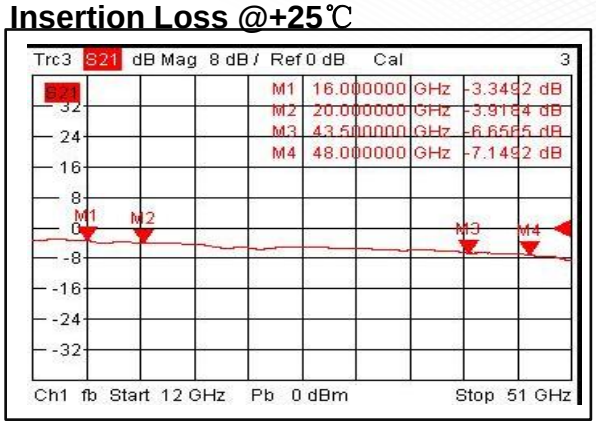
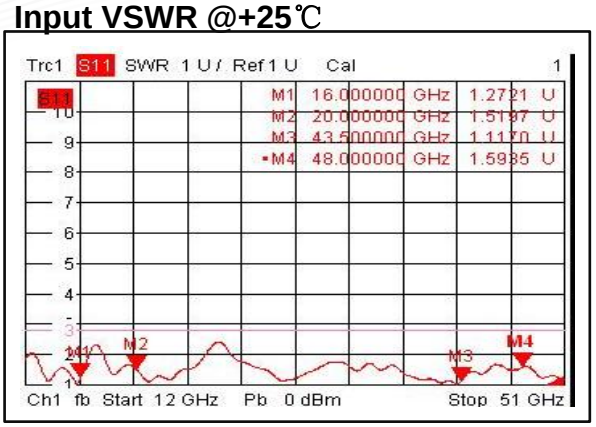
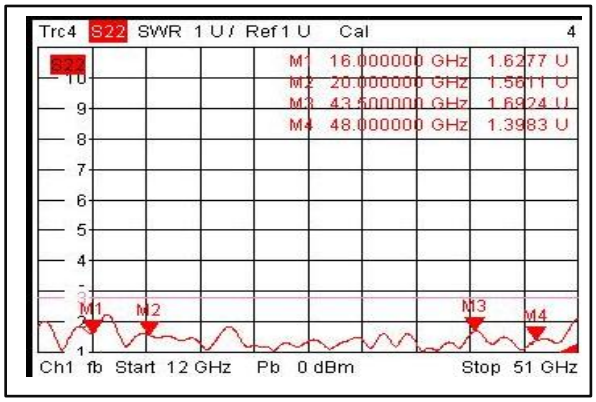
Insertion Loss @+25℃



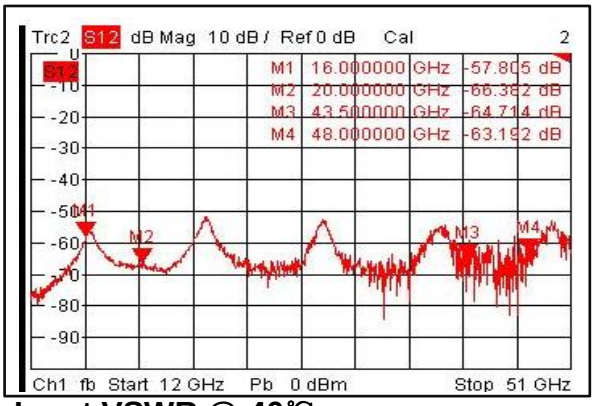
Input VSWR @+25℃



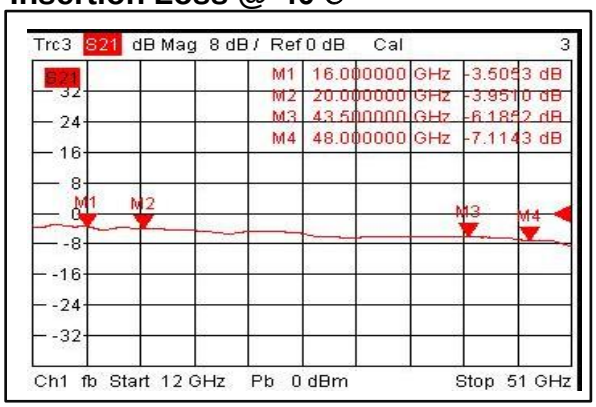
Output VSWR @+25℃



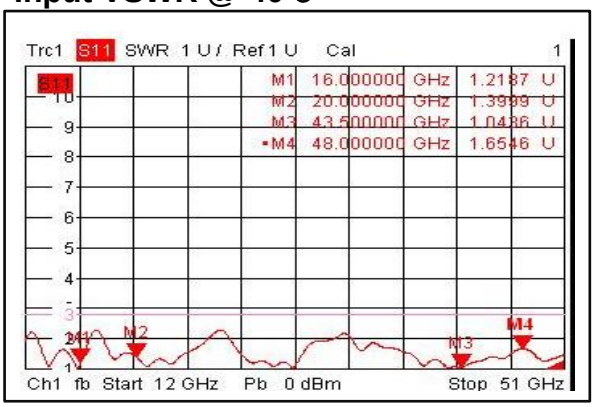
Isolation @+25℃



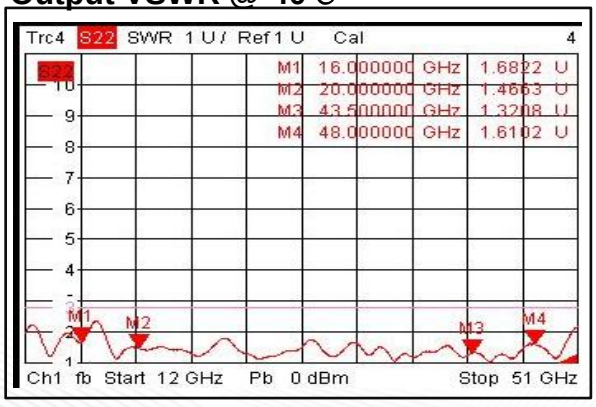
Insertion Loss @-40℃



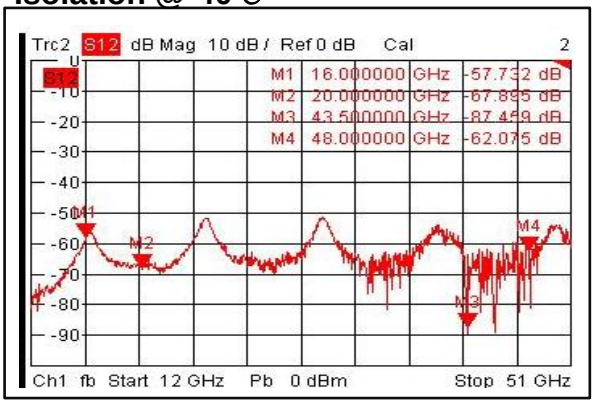
Input VSWR @-40℃



Output VSWR @-40℃



Isolation @-40℃



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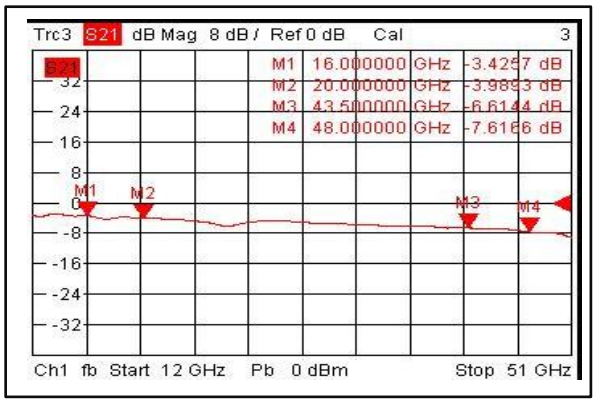
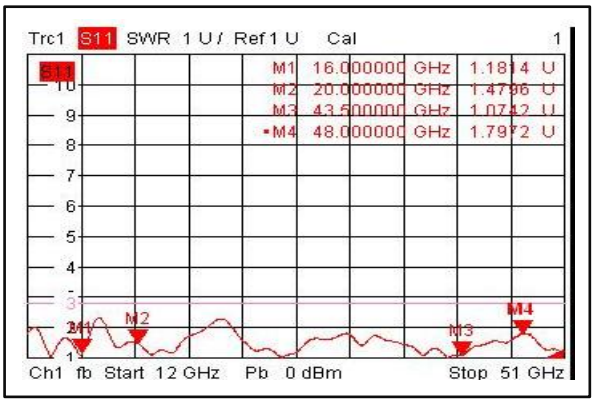
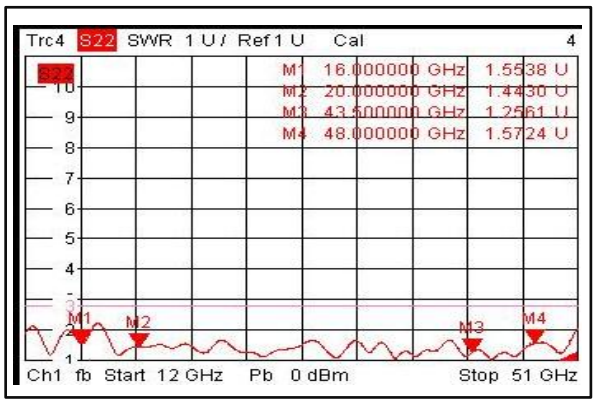
Insertion Loss @+85℃



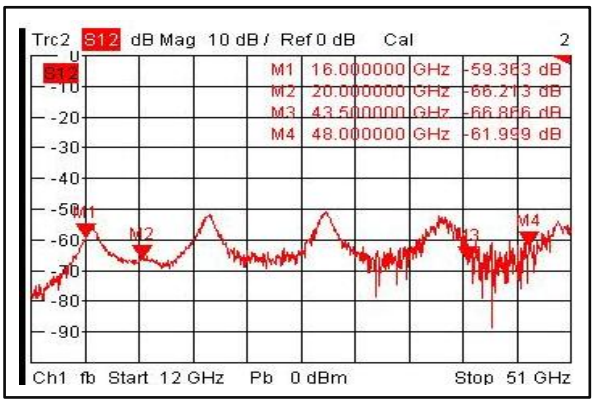
Input VSWR @+85℃



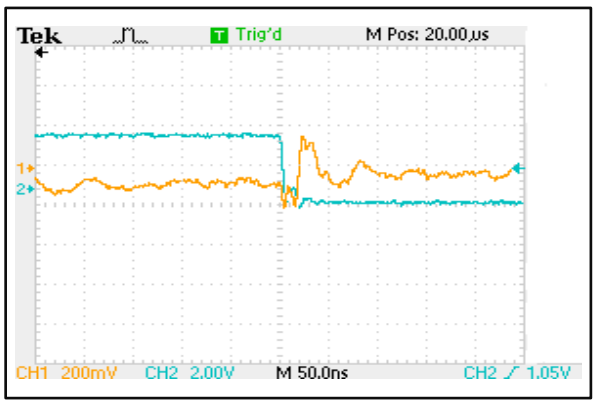
Output VSWR @+85℃



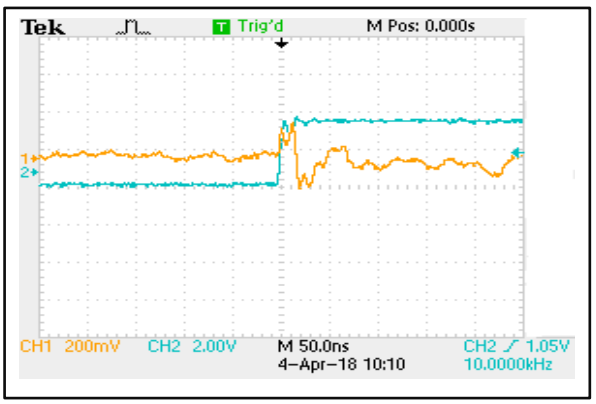
Isolation @+85℃



Switching Speed



Switching Speed



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