Absorptive 0.1-40GHz Coaxial SP4T Switch

Features

- Ultra Wide Band Operation 0.1-40GHz
- 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	Min	Typ.	Max	Units
Frequency Range		0.1-18			18-40		GHz
Insertion Loss		4.5	6.0		5.5	7.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ °C
Isolation	70	75		65	70		dB
Input VSWR		2	3		2.5	3	: 1
Output VSWR		2	3		2.5	3	: 1
RF Input power			23			23	dBm
DC Power Dissipation			0.85			0.85	W
0.1dB Compression P0.1dB		23			23		dBm
IIP3		55			50		dBm
Switching Speed	100						ns
Weight	1.06						Ounces
Impedance	50						Ω
Bias Current(+5V/-5V)	150/50						mA
Input /Output Connectors	2.92mm-Female						
Interface and control connertor	MICRO-D9(Female)						
Finish	Gold Plating						
Material	Aluminum						
Sealing	Hermetically Sealed (optional)						

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Absolute Maximum Ratings

Biasing	+5V±10%/-5V±10%

Ordering Information

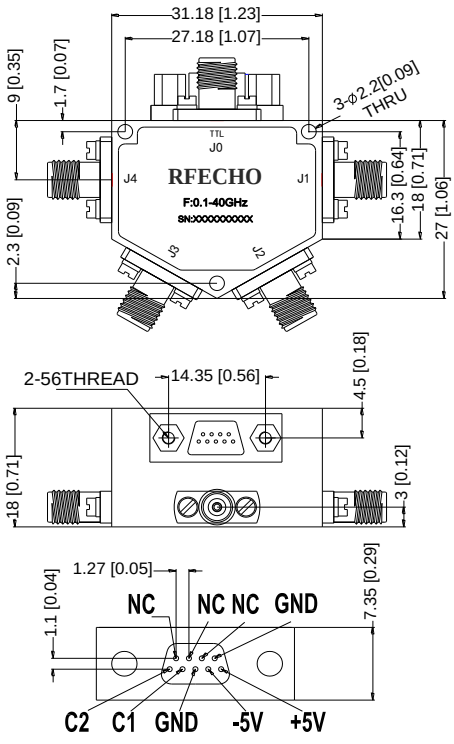
Part No.	Description
DBSA0400104000C	SP4T 0.1-40GHz PIN Diode Switch

Environmental Specifications

Operational Temperature	-40℃~+85℃ (Case Temperature)
Storage Temperature	-50℃~+105℃
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

Outline Drawing:

All Dimensions in mm (inches)



MICRO-D9(Female)

Truth Table

TTL Control Voltage THRESHOLD		Low(0)=0~0.8V
		High(1)=2.8~5V
Control Input TTL		Signal Path State
C2	C1	
0	0	J0-J1
0	1	J0-J2
1	0	J0-J3
1	1	J0-J4
Control Pin Customization available upon request		

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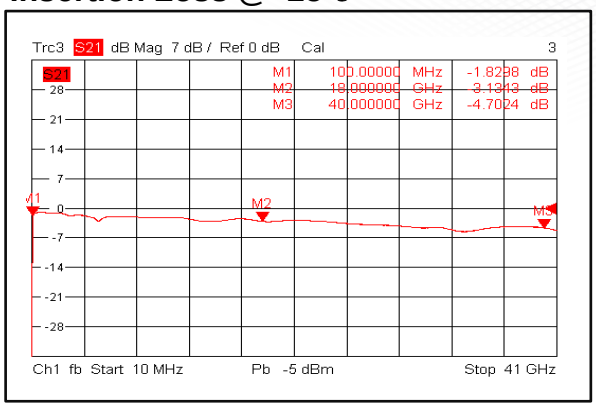
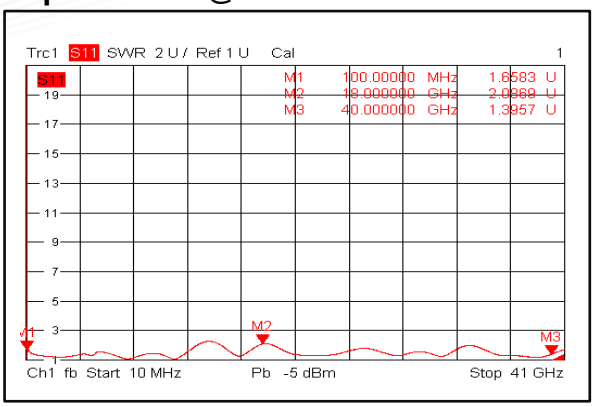
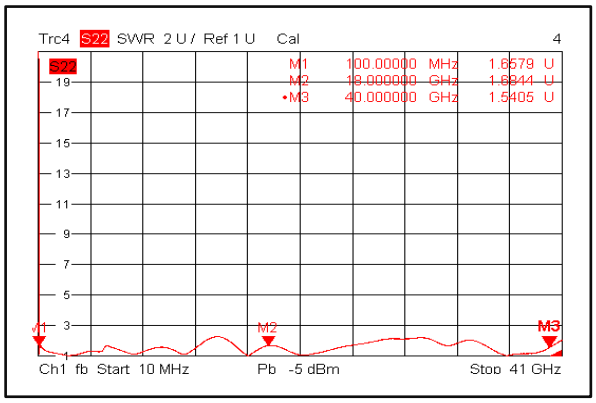
Insertion Loss @+25℃



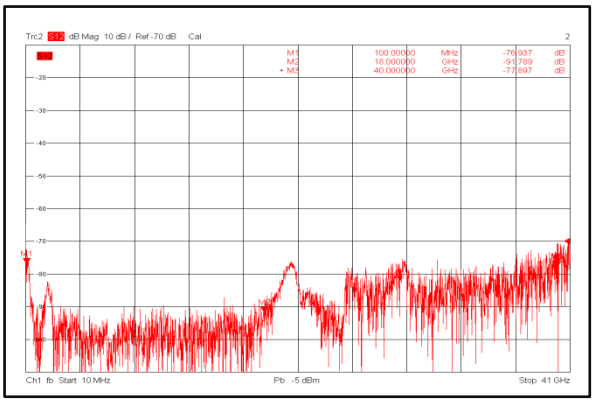
Input VSWR @+25℃



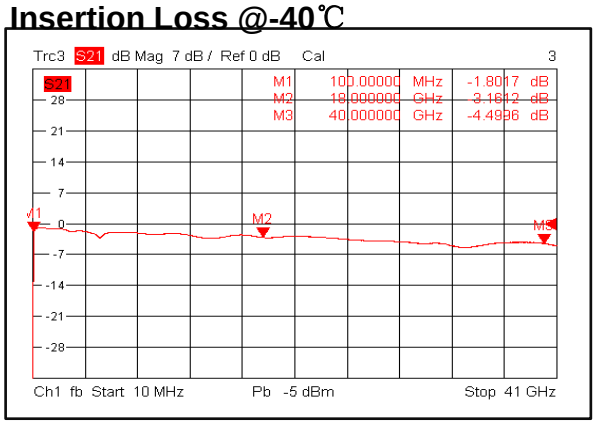
Output VSWR @+25℃



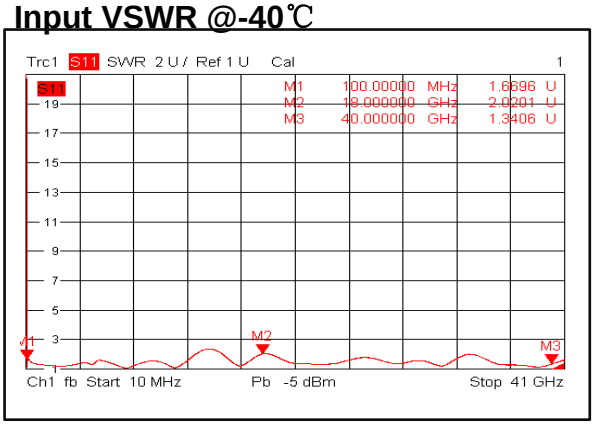
Isolation @+25℃



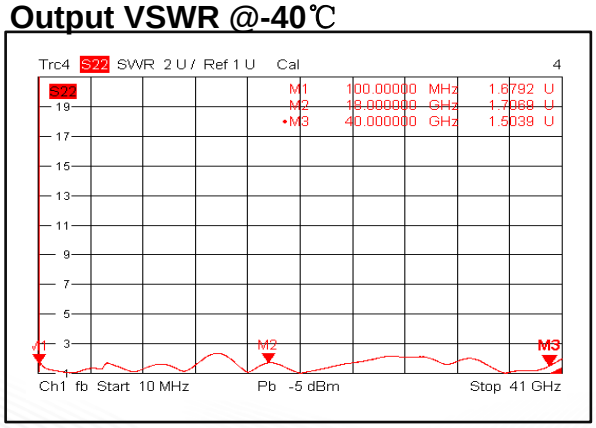
Insertion Loss @-40℃



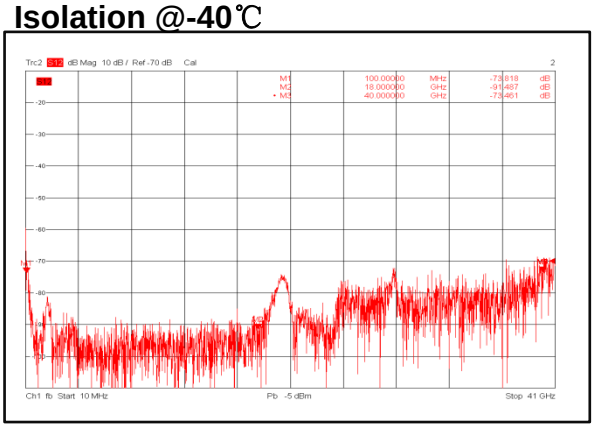
Input VSWR @-40℃



Output VSWR @-40℃



Isolation @-40℃



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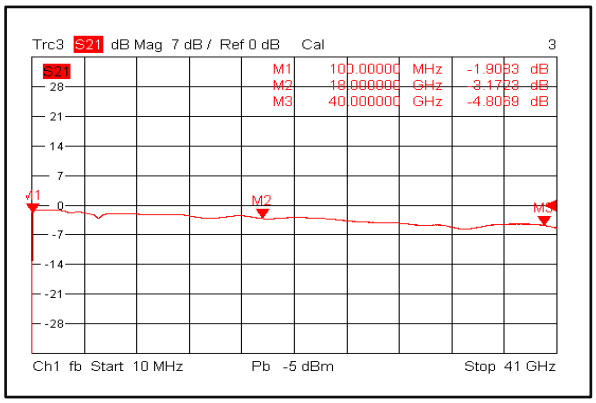
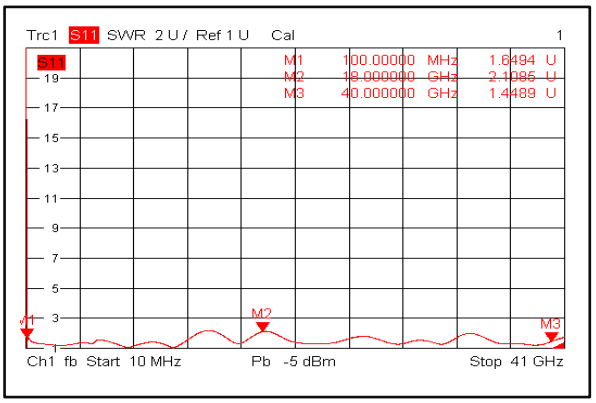
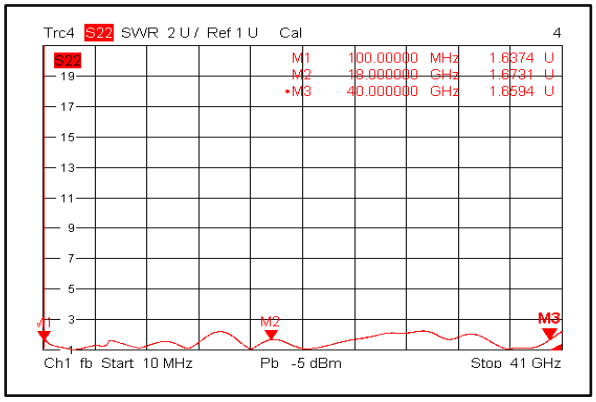
Insertion Loss @+85℃



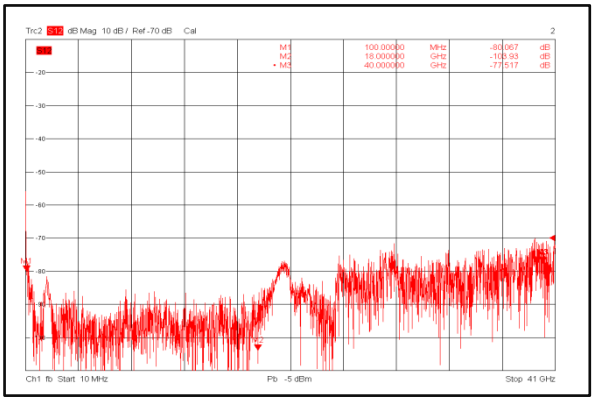
Input VSWR @+85℃



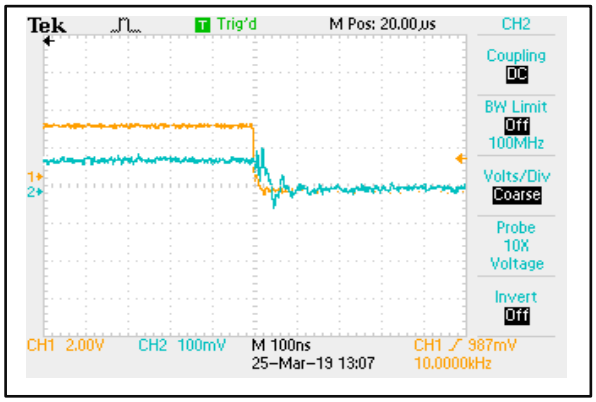
Output VSWR @+85℃



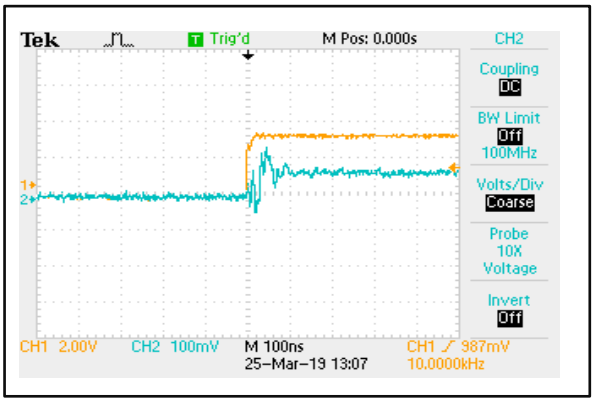
Isolation @+85℃



Switching Speed



Switching Speed



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