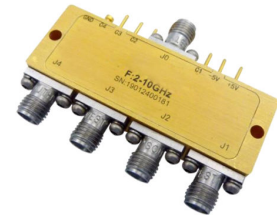




Absorptive 2-10GHz Coaxial SP4T Switch

Features

- Wide Band Operation 2-10GHz
- 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	2~10			GHz
Insertion Loss		1.7	2.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	60	75		dB
Input VSWR			1.5	: 1
Output VSWR			1.5	: 1
RF Input power (CW)			30	dBm
DC Power Dissipation		1		W
0.1dB Compression Point (P0.1dB)			30	dBm
IIP3		50		dBm
Switching Speed	100			ns
Weight	1.06			ounces
Impedance	50			Ω
Bias Current (+5V/-5V)	160/50			mA
Input /Output Connectors	SMA-Female			
Finish	Gold Plating			
Material	Aluminum			
Seal	Hermetically Sealed (optional)			



Absolute Maximum Ratings

Biassing	+5V ± 10%/-5V ± 10%
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Environmental Specifications

Operational Temperature	-40°C ~ +85°C (Case Temperature)
Storage Temperature	-50°C ~ +105°C
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 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

Ordering Information

Part No.	Description
DBSA0402001000A	SP4T 2-10GHz PIN Diode Switch

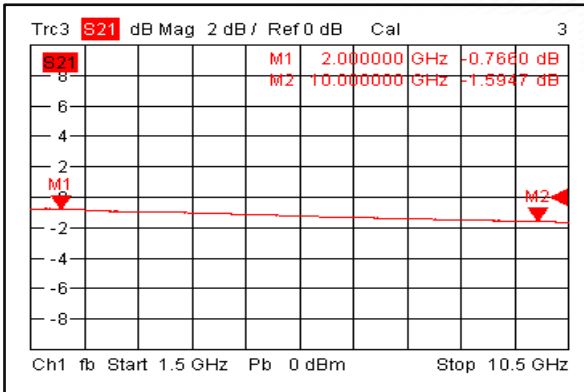
Outline Drawing:

All Dimensions in mm (inches)

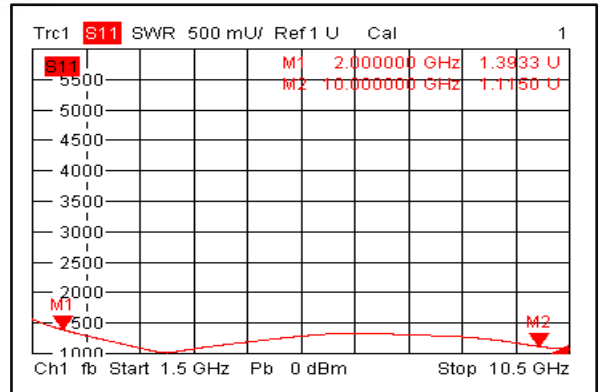
TTL Control Voltage THRESHOLD				Low(0)=0~0.8V	High(1)=2.8~5V
Control	Input	TTL		Signal Path State	
C4	C3	C2	C1		
0	0	0	0	Not used	
1	1	1	0	J0-J1	
1	1	0	1	J0-J2	
1	0	1	1	J0-J3	
0	1	1	1	J0-J4	
1	1	1	1	OFF	
Control Pin Customization available upon request					



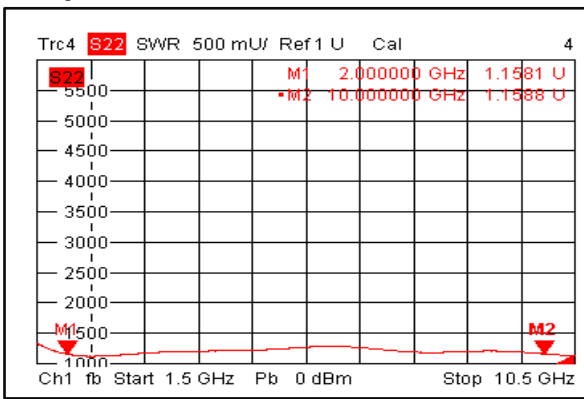
Insertion Loss @+25°C



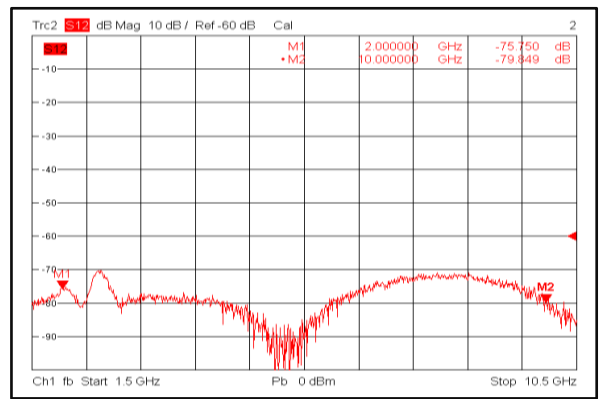
Input VSWR @+25°C



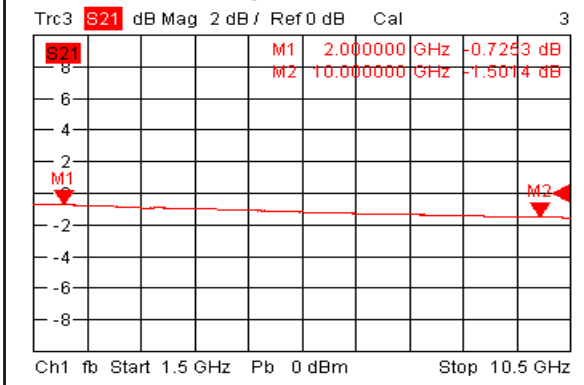
Output VSWR @+25°C



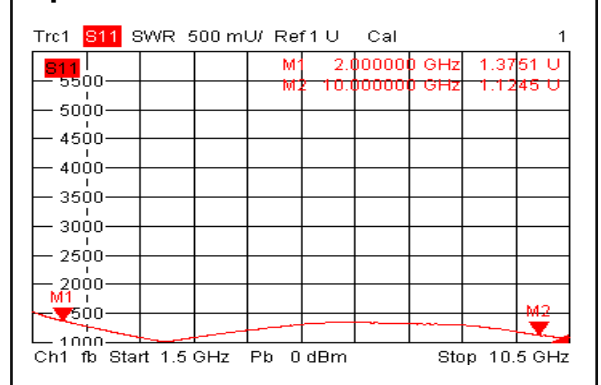
Isolation @+25°C



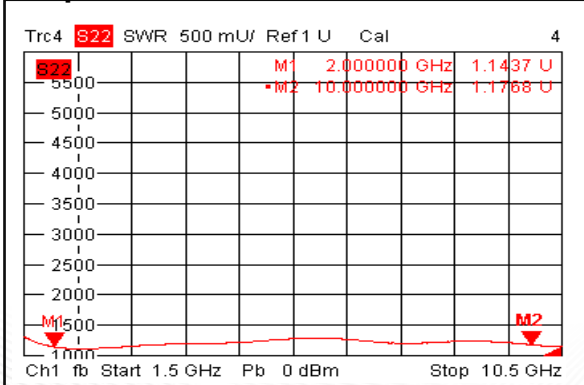
Insertion Loss @-40°C



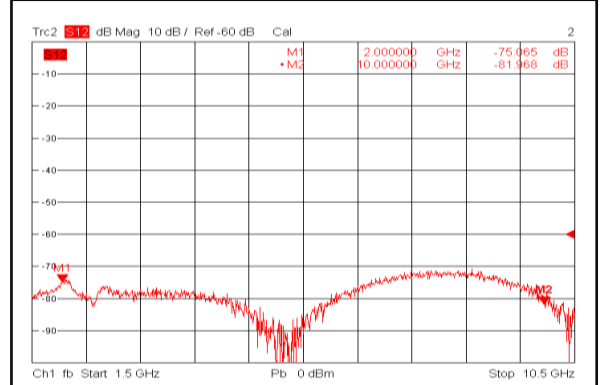
Input VSWR @-40°C



Output VSWR @-40°C

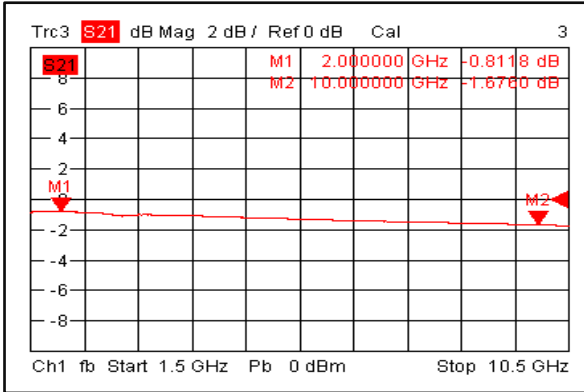


Isolation @-40°C

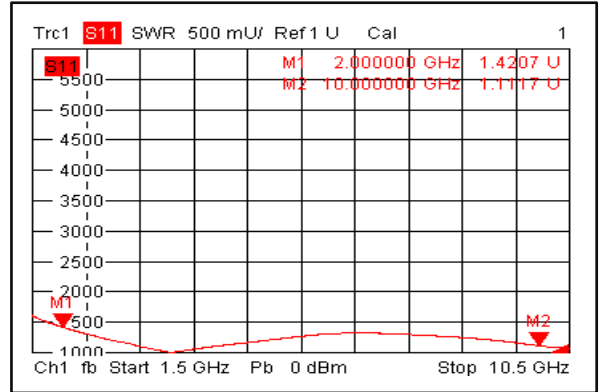




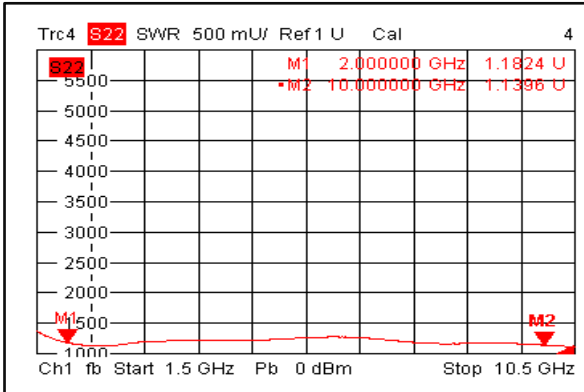
Insertion Loss @+85°C



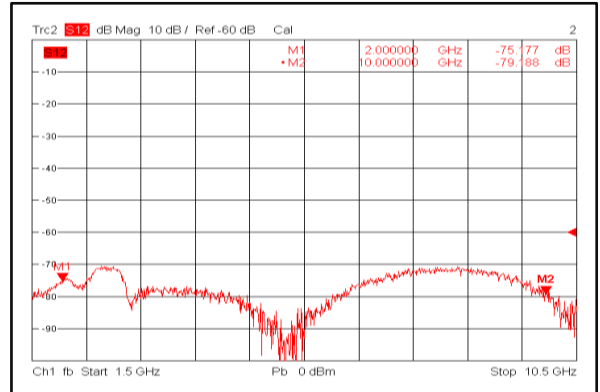
Input VSWR @+85°C



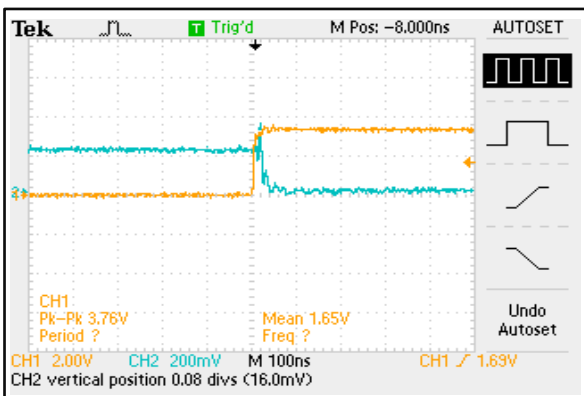
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

