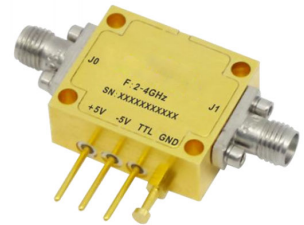




Absorptive 2-4GHz Coaxial SPST Switch

Features

- Ultra Wide Band Operation 2-4GHz
- 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		2-4		GHz
Insertion Loss		1.0	1.2	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	80	85		dB
Input VSWR		1.3	1.5	: 1
Output VSWR		1.3	1.5	: 1
RF Input Power			30	dBm
DC Power Dissipation		0.3		W
0.1dB Compression (P0.1dB)		30		dBm
IIP3		48		dBm
Switching Speed		100 Max.		ns
Weight		0.45 Max.		ounces
Impedance		50		Ω
Bias Current (+5V/-5V)		70/50Max.		mA
Input / Output Connectors		SMA - Female		
Finish		Gold Plated		
Material		Aluminum		
Sealing		Hermetically Sealed (Optional)		



Absolute Maximum Ratings

Biasing	+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
DBSA0102000400A	SPST 2-4GHz PIN Diode Switch

Outline Drawing:

All Dimensions in mm (inches)

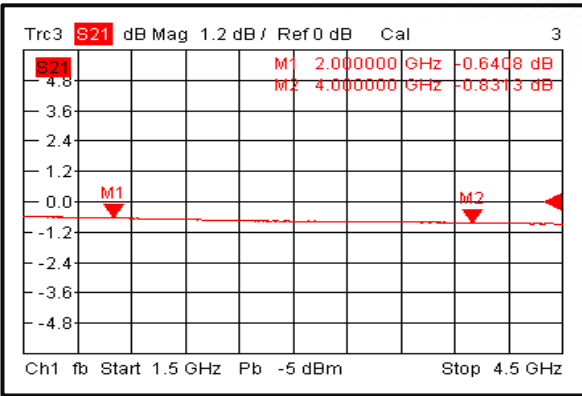
Notes:
J0: Absorptive Port
J1: Reflective port

Truth Table

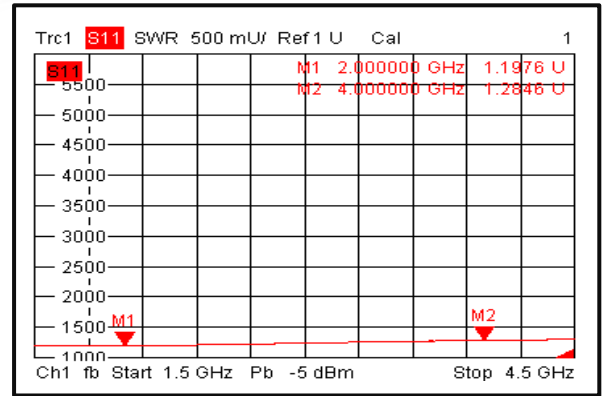
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
0	OFF
1	ON
Control Pin Customization available upon request	



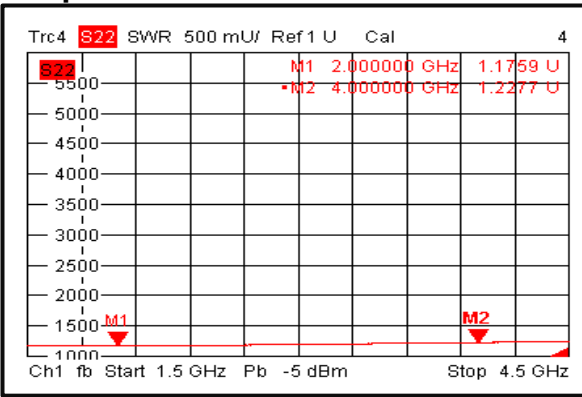
Insertion Loss @+25°C



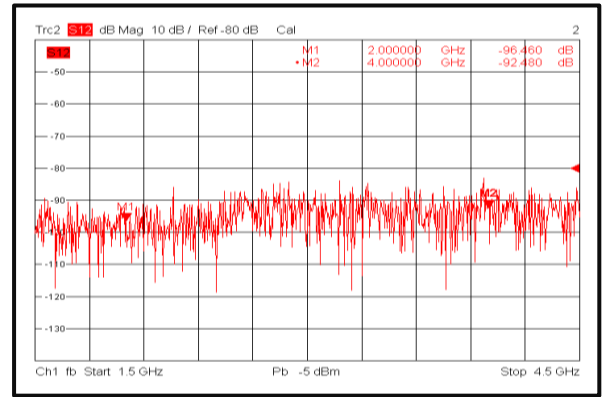
Input VSWR @+25°C



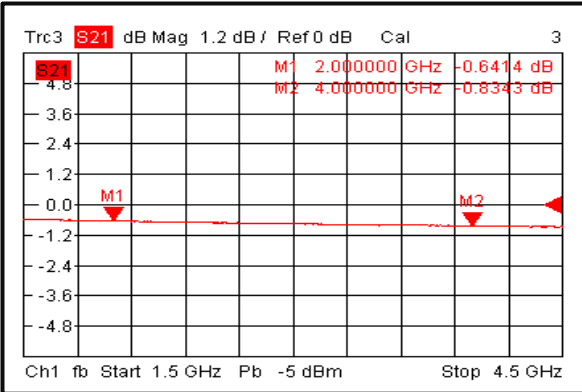
Output VSWR @+25°C



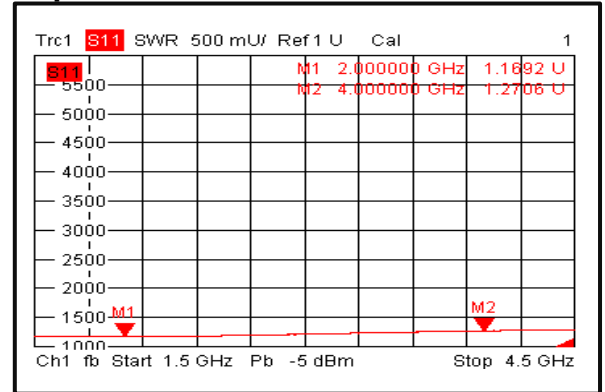
Isolation @+25°C



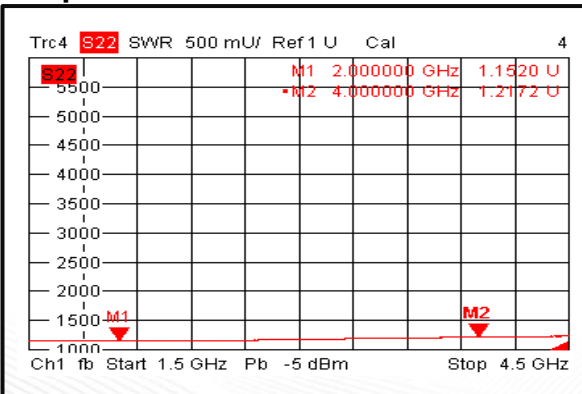
Insertion Loss @-40°C



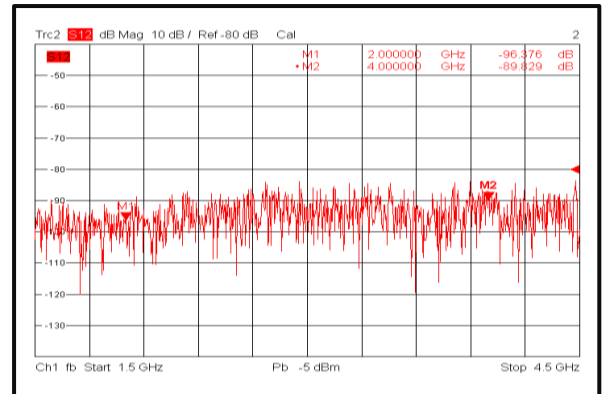
Input VSWR @-40°C



Output VSWR @-40°C

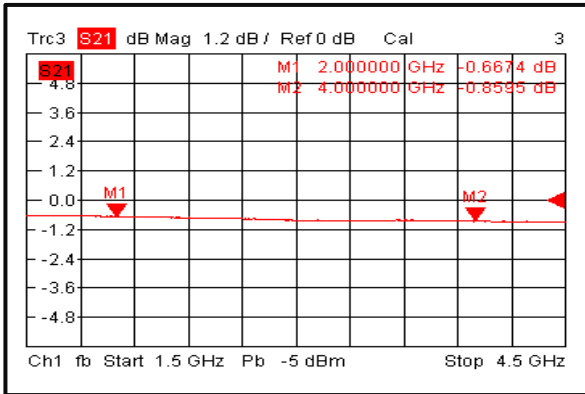


Isolation @-40°C

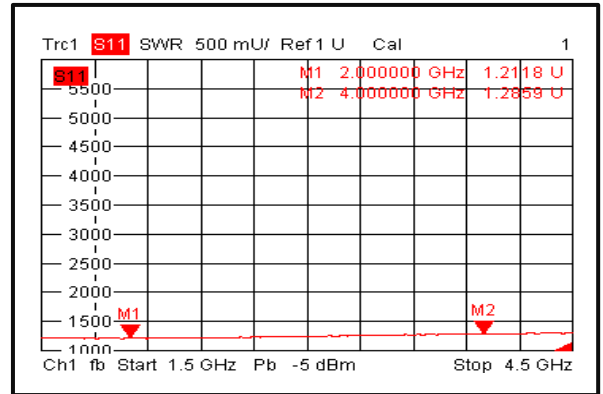




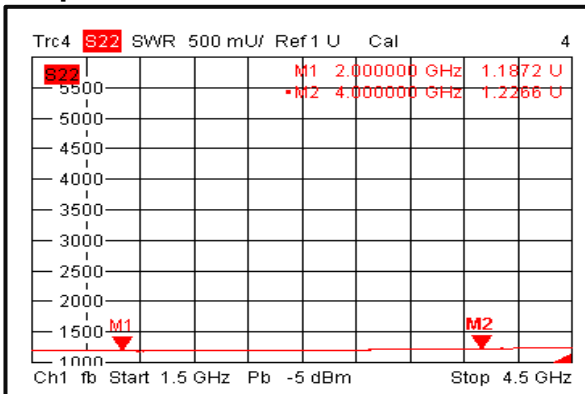
Insertion Loss @+85°C



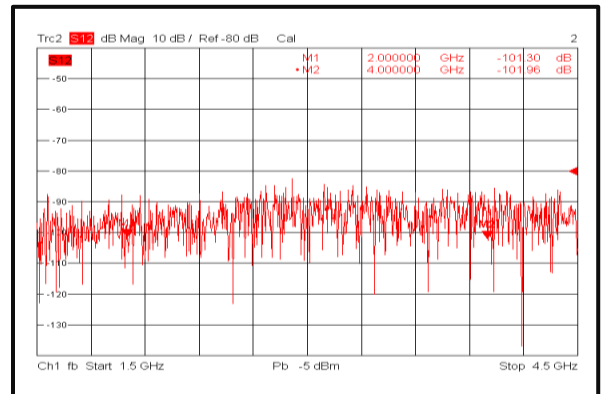
Input VSWR @+85°C



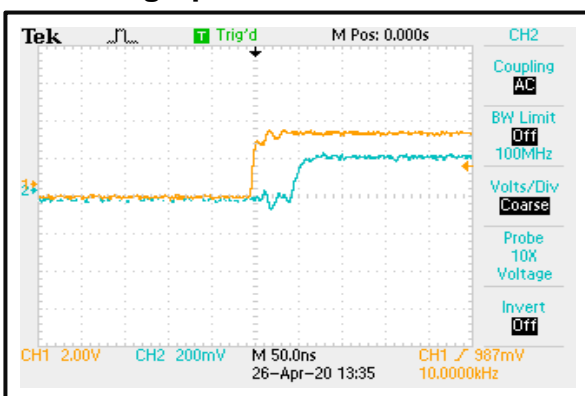
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

