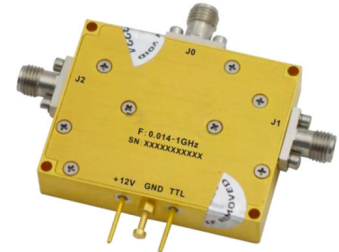




# Absorptive 0.014-1GHz Coaxial SP2T Switch

## Features

- Wide Band Operation 0.014-1GHz
- 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	0.014~1			GHz
Insertion Loss		1	1.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	65	80		dB
Input VSWR		1.2	1.6	: 1
Output VSWR		1.2	1.6	: 1
RF Input power			37	dBm
DC Power Dissipation		1.8		W
0.1dB Compression Point (P0.1dB)			37	dBm
IIP3		55		dBm
Switching Speed			3.2	us
Weight	1.41			ounces
Impedance	50			$\Omega$
Bias Current (+12V )	150			mA
Input /Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed ( optional )			



### Absolute Maximum Ratings

Biassing	+12V ± 10%
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### Ordering Information

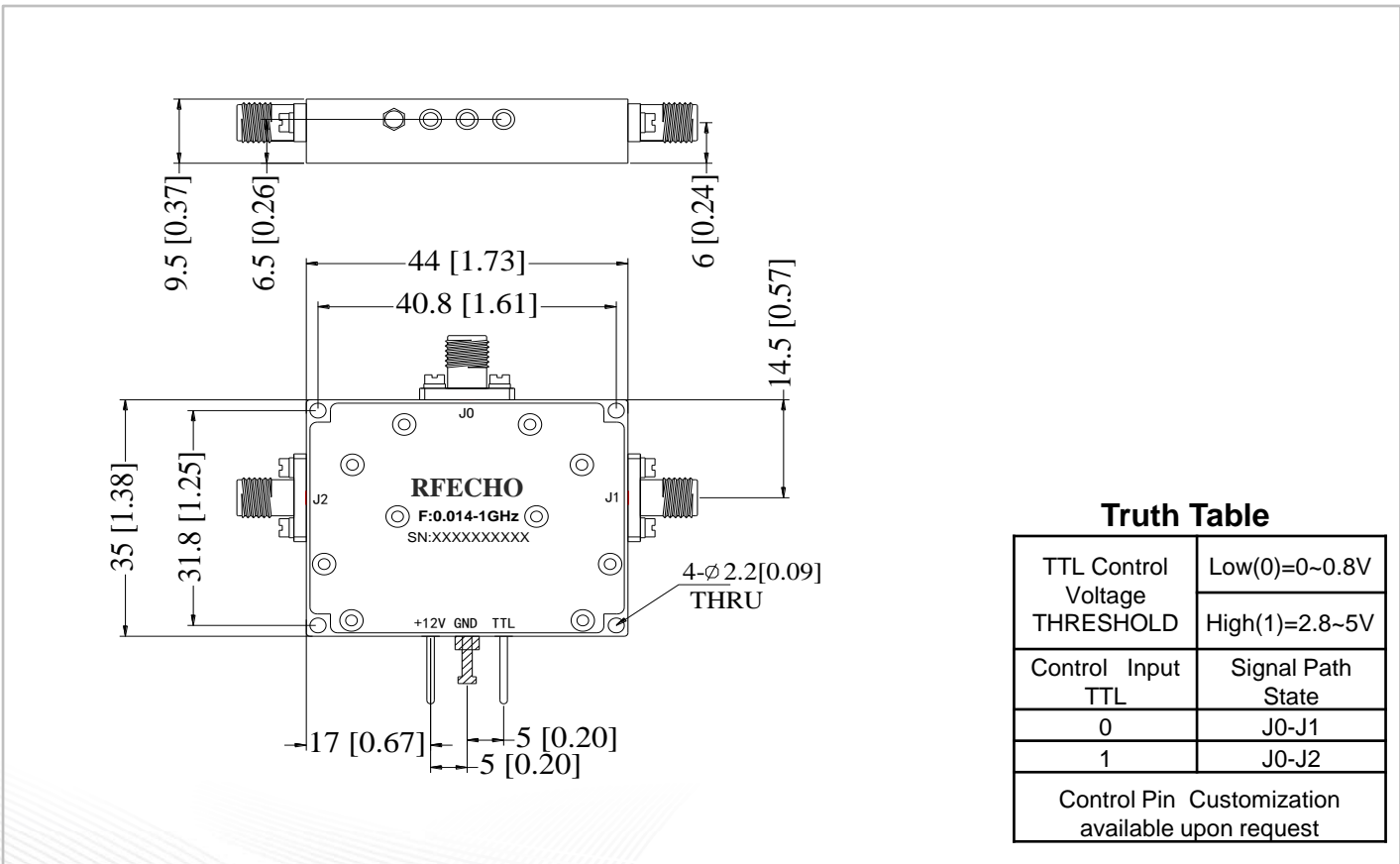
Part No.	Description
DBSA020000100A	SP2T 0.014-1GHz PIN Diode Switch

### Environmental Specifications

Operational Temperature	-40°C~+85°C
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

### Outline Drawing:

All Dimensions in mm (inches)

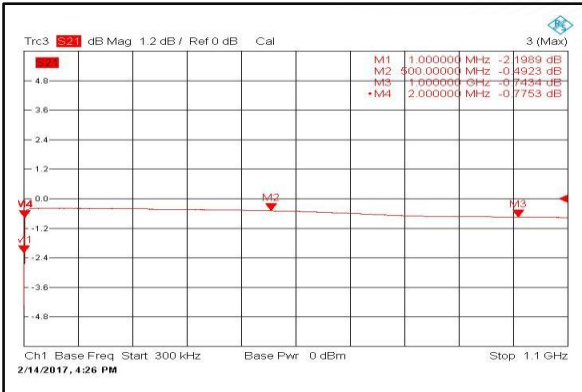


### Truth Table

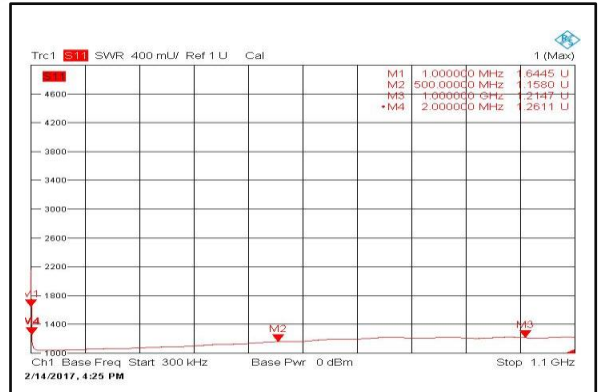
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
0	J0-J1
1	J0-J2
Control Pin Customization available upon request	



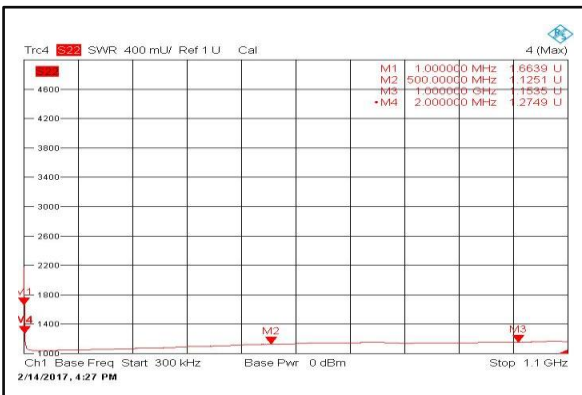
### Insertion Loss @+25°C



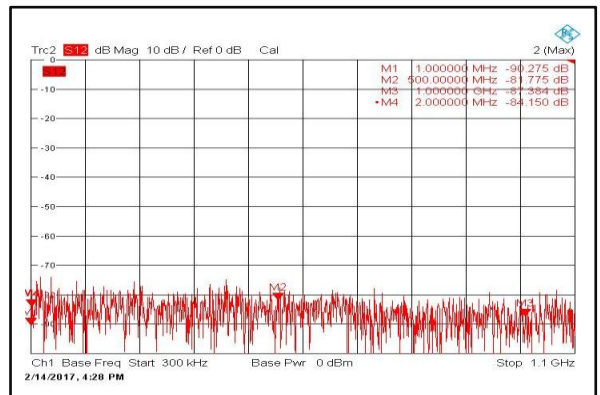
### Input VSWR @+25°C



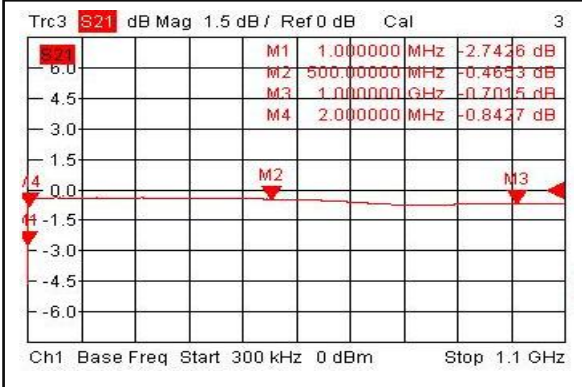
### Output VSWR @+25°C



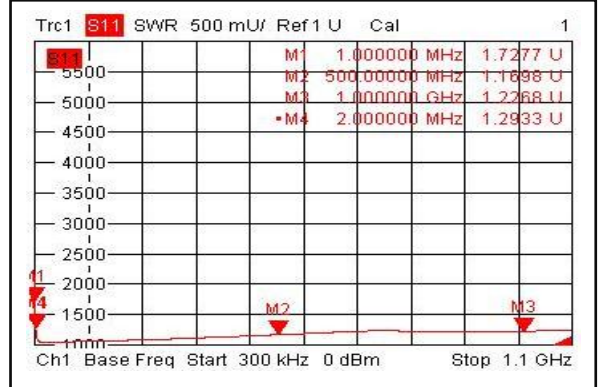
### Isolation @+25°C



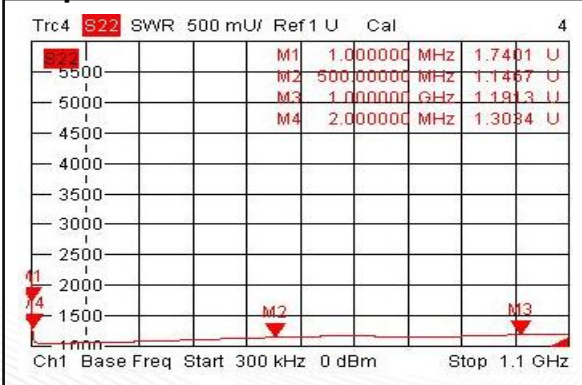
### Insertion Loss @-40°C



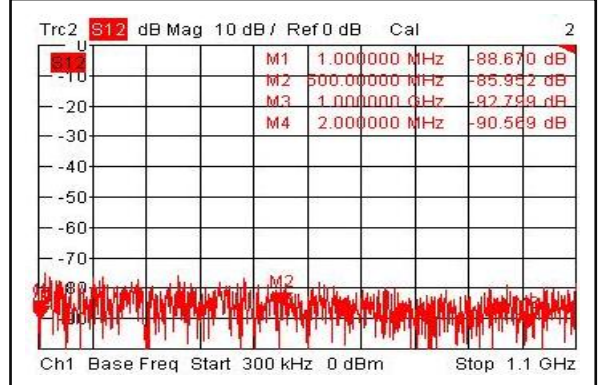
### Input VSWR @-40°C



### Output VSWR @-40°C

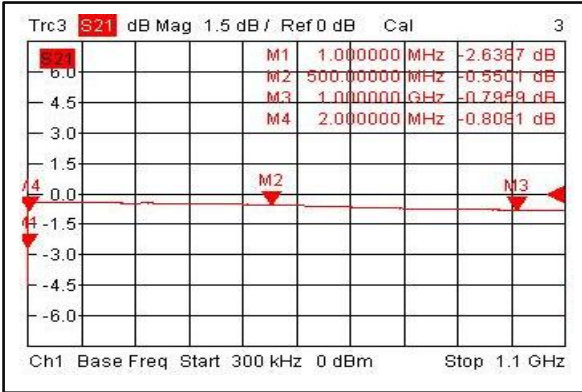


### Isolation @-40°C

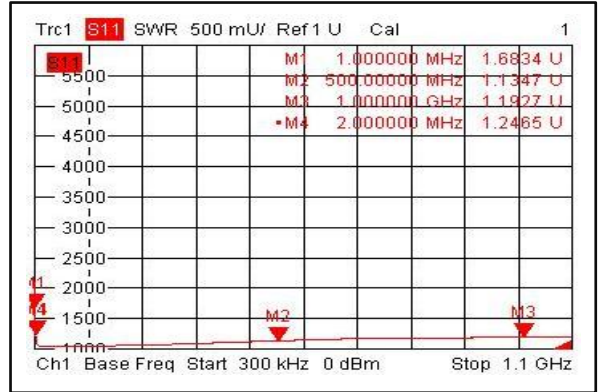




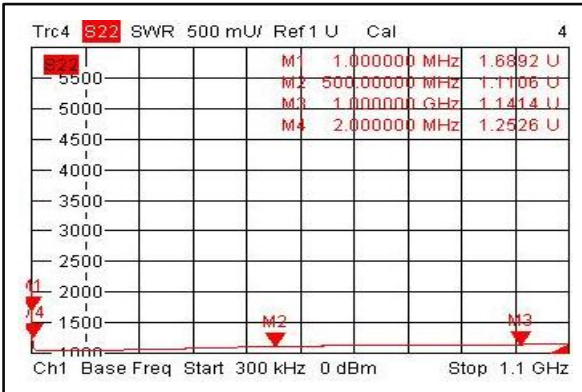
### Insertion Loss @+85°C



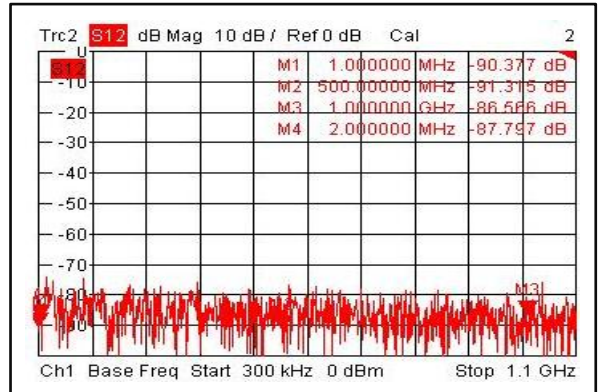
### Input VSWR @+85°C



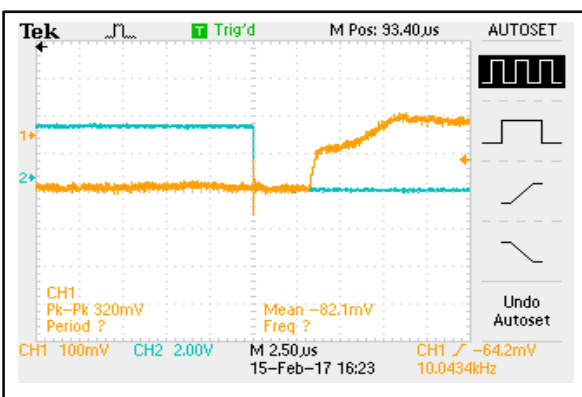
### Output VSWR @+85°C



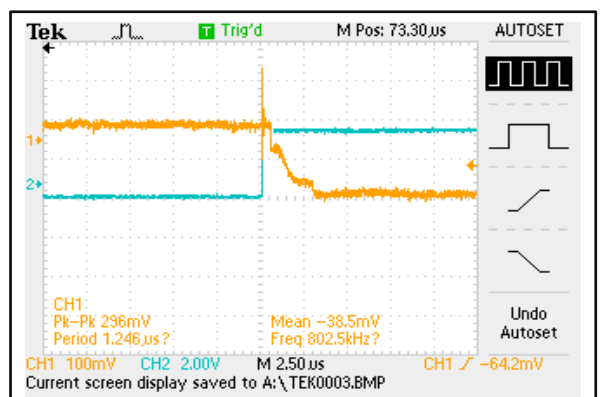
### Isolation @+85°C



### Switching Speed



### Switching Speed





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