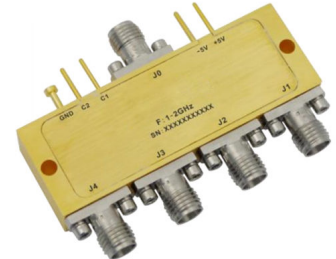




Absorptive 1-2GHz Coaxial SP4T Switch

Features

- Wide Band Operation 1-2GHz
- 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	1-2			GHz
Insertion Loss		0.6	1.2	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	80	90		dB
Input VSWR		1.2	1.5	: 1
Output VSWR		1.2	1.5	: 1
RF Input power	1			W
Power Dissipation (CW)		0.3		W
0.1dB Compression P0.1dB		30		dBm
IM3		40		dBc
IIP3		50		dBm
Switching Speed		50	100	ns
Weight	1.2			ounces
Impedance	50			Ω
Biasing(+5V/-5V)	160/50			mA
Input /Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Seal	Hermetically Sealed (optional)			



Absolute Maximum Ratings

Biasing	+5V $\pm$ 10%/-5V $\pm$ 10%
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Ordering Information

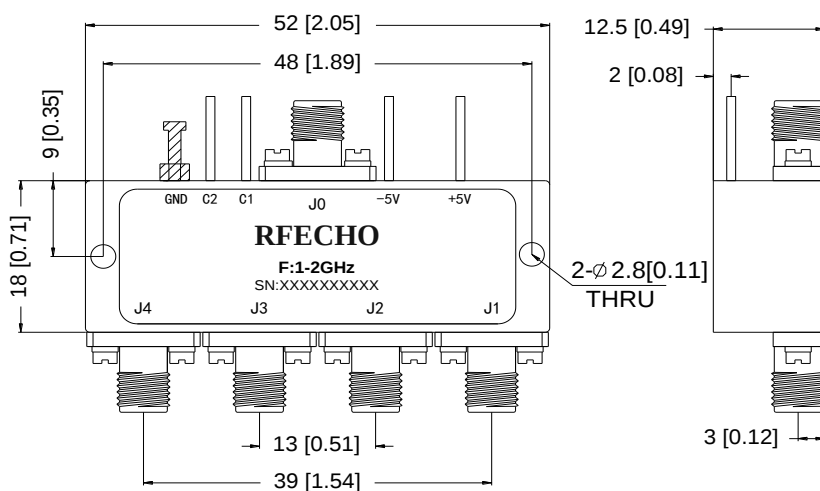
Part No.	Description
DBSA0401000200A	SP4T 1-2GHz PIN Diode Switch

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

Outline Drawing:

All Dimensions in mm (inches)

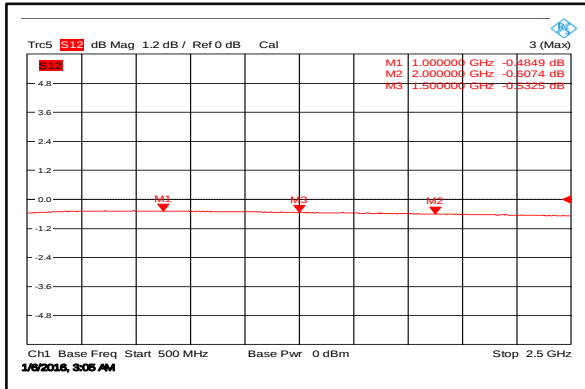


Truth Table

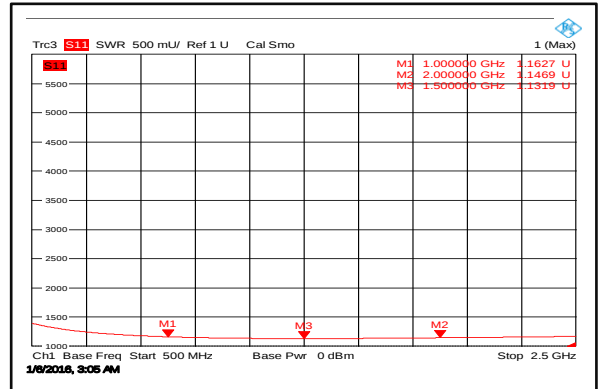
TTL Control Voltage THRESHOLD		Low(0)=0~0.8V
		High(1)=2.8~5V
Control	Input TTL	Signal Path State
C2	C1	
0	0	J0-J1
1	0	J0-J2
0	1	J0-J3
1	1	J0-J4
Control Pin Customization available upon request		



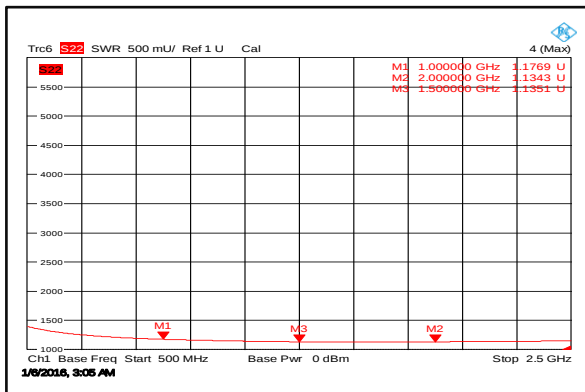
Insertion Loss



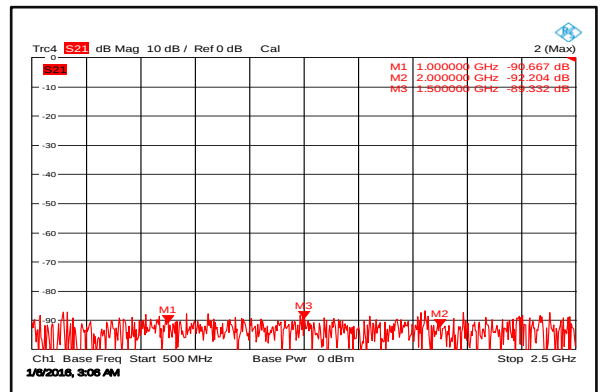
Input VSWR



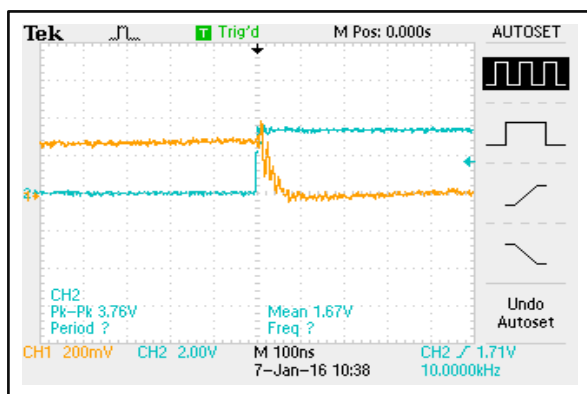
Output VSWR



Isolation



Turn on Switching Speed



Turn off Switching Speed

