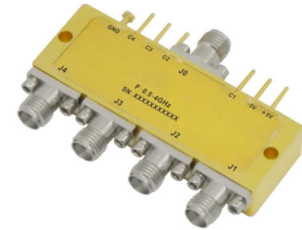




Absorptive 0.5-4GHz Coaxial SP4T Switch

Features

- Wide Band Operation 0.5-4GHz
- 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	0.5-4			GHz
Insertion Loss		1.2	1.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	75	80		dB
Input VSWR		1.3	1.5	: 1
Output VSWR		1.3	1.5	: 1
RF Input power (CW)	1			W
Power Dissipation (CW)		0.3		W
0.1dB Compression P0.1dB		30		dB
IM3		40		dBc
IIP3		50		dBm
Switching Speed			100	ns
Weight	1.22			ounces
Impedance	50			Ω
Biasing(+5V/-5V)	160/50			mA
Input /Output Connectors	SMA-Female (Standard)			
Finish	Gold Plated			
Material	Aluminum			
Seal	Hermetically Sealed (optional)			



Absolute Maximum Ratings

Biasing	+5V ± 10%/-5V ± 10%
---------	---------------------

Ordering Information

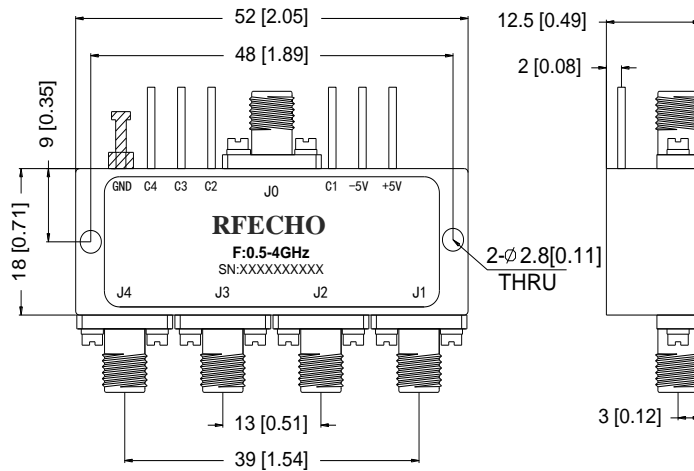
Part No.	Description
DBSA0400500400B	SP4T 0.5-4GHz PIN Diode Switch

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 Uncontrolled 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)

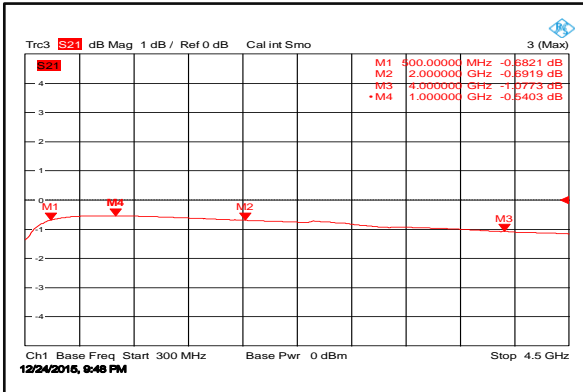


Truth Table

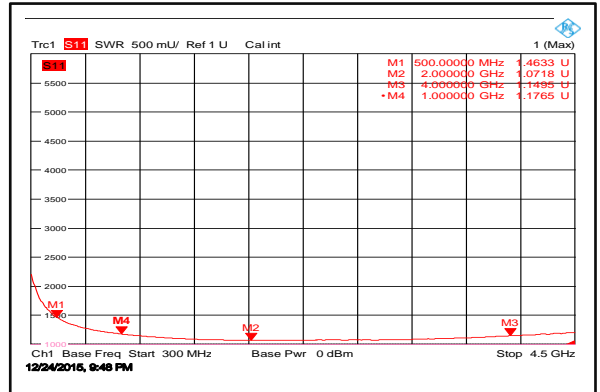
TTL Control Voltage THRESHOLD				Low(0)=0~0.8V
				High(1)=2.8~5V
Control	Input TTL			Signal Path State
C4	C3	C2	C1	
1	1	1	1	OFF
1	1	1	0	J0-J1
1	1	0	1	J0-J2
1	0	1	1	J0-J3
0	1	1	1	J0-J4
0	0	0	0	NC
Control Pin Customization available upon request				



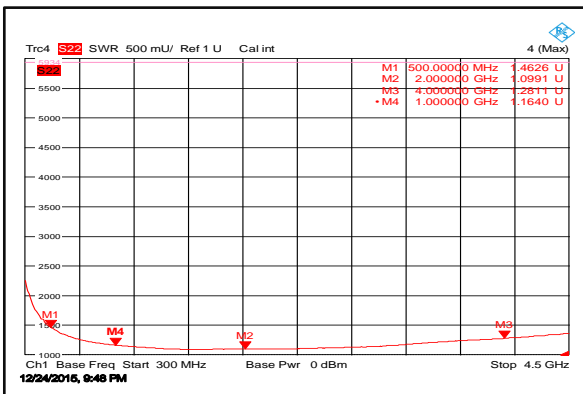
Insertion Loss



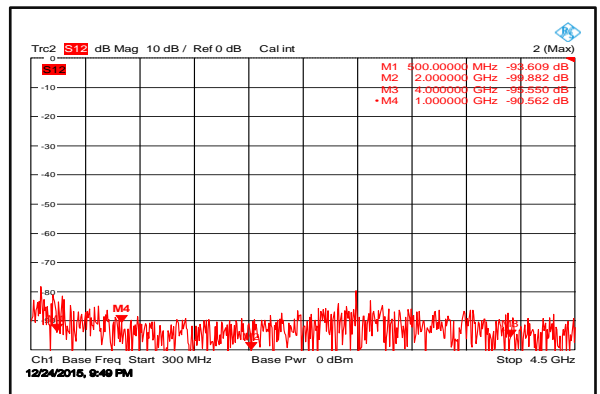
Input VSWR



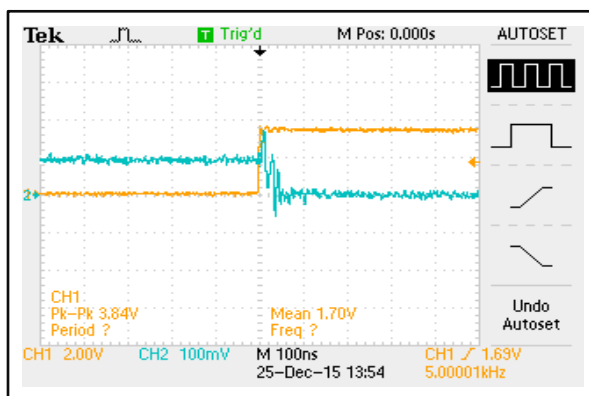
Output VSWR



Isolation



Switching Speed



Switching Speed

