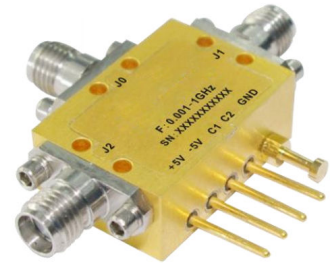




Absorptive 0.001-1GHz Coaxial SP2T Switch

Features

- Wide Band Operation 0.001-1GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation



Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

Parameters	Min.	Typ.	Max.	Units
Frequency Range	0.001~1			GHz
Insertion Loss		1	1.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	80	85		dB
Input VSWR		1.2	1.5	: 1
Output VSWR		1.2	1.5	: 1
RF Input Power			30	dBm
Power Dissipation (CW)		0.25		W
0.1dB Compression Point (P0.1dB)		30		dBm
IM3		40		dBc
Switching Speed			500	ns
Weight	1.2			ounces
Impedance	50			Ω
Bias Current (+5/ -5V)	80/50.			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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Ordering Information

Part No.	Description
DBSA0200000100B	SP2T 0.001-1GHz 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)

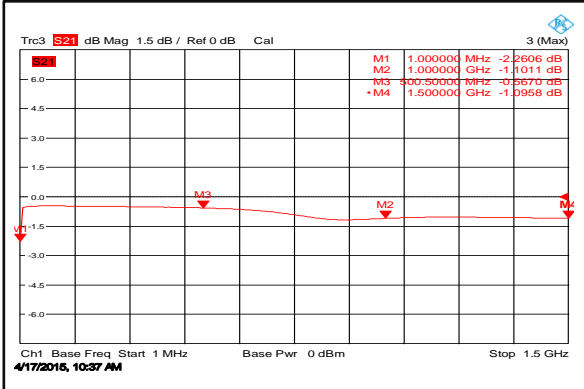
Truth Table

TTL Control Voltage THRESHOLD		Low(0)=0~0.8V
		High(1)=2.8~5V
Control Input TTL		Signal Path State
C1	C2	
0	0	OFF
0	1	J0-J1
1	0	J0-J2

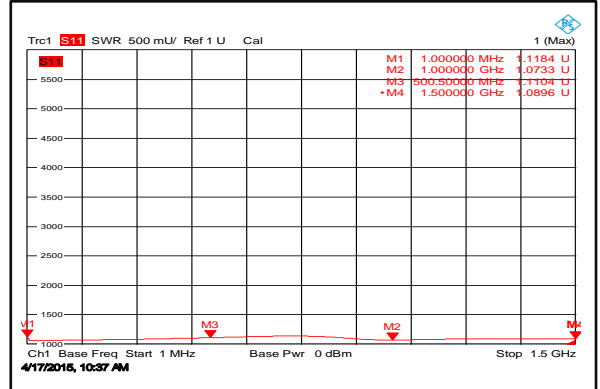
Control Pin Customization available upon request



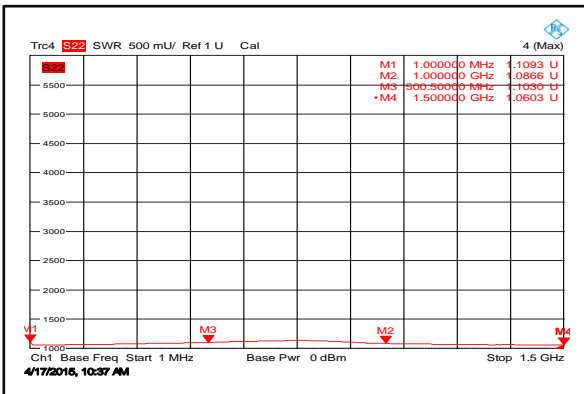
Insertion Loss



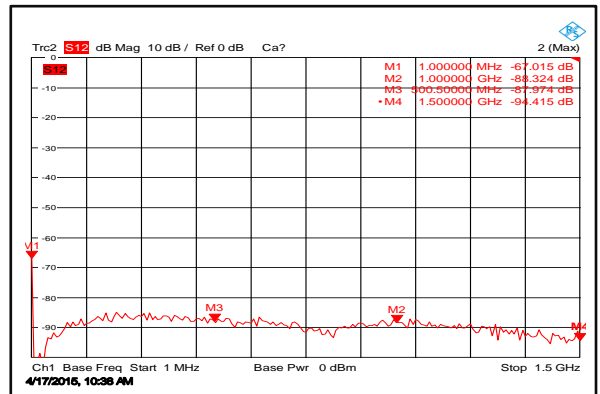
Input VSWR



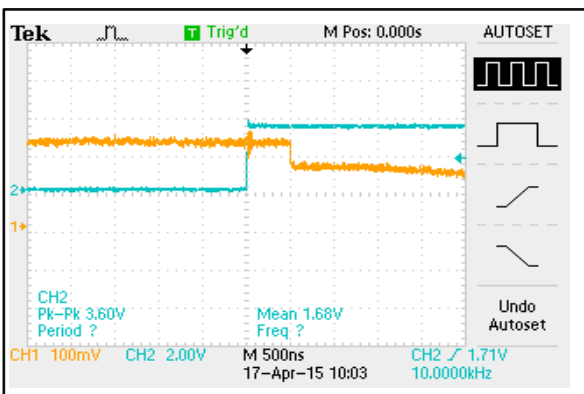
Output VSWR



Isolation



Switching Speed



Switching Speed

