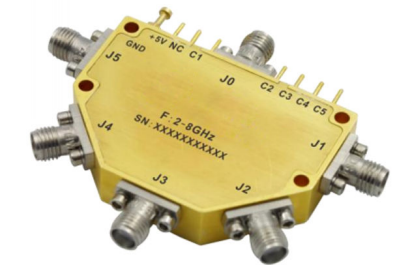
Reflection 2-8GHz Coaxial SP5T Switch

Features

- Wide Band Operation 2-8GHz
- 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 - 8		GHz
Insertion Loss		1.5	2.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	60	80		dB
Input VSWR		1.5	1.8	: 1
Output VSWR		1.5	1.8	: 1
RF Input Power			36	dBm
DC Power Dissipation		1.2		W
0.1dB Compression Point (P0.1dB)		36		dBm
IIP3		55		dBm
Switching Speed			100	ns
Weight		1.41		Ounces
Impedance		50		Ω
Bias Current (+5V)		250		mA
Input / Output Connectors		SMA-Female		
Finish		Gold Plated		
Material		Aluminum		
Sealing		Hermetically Sealed (optional)		

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Absolute Maximum Ratings

Biasing	+5V±10%

Environmental Specifications

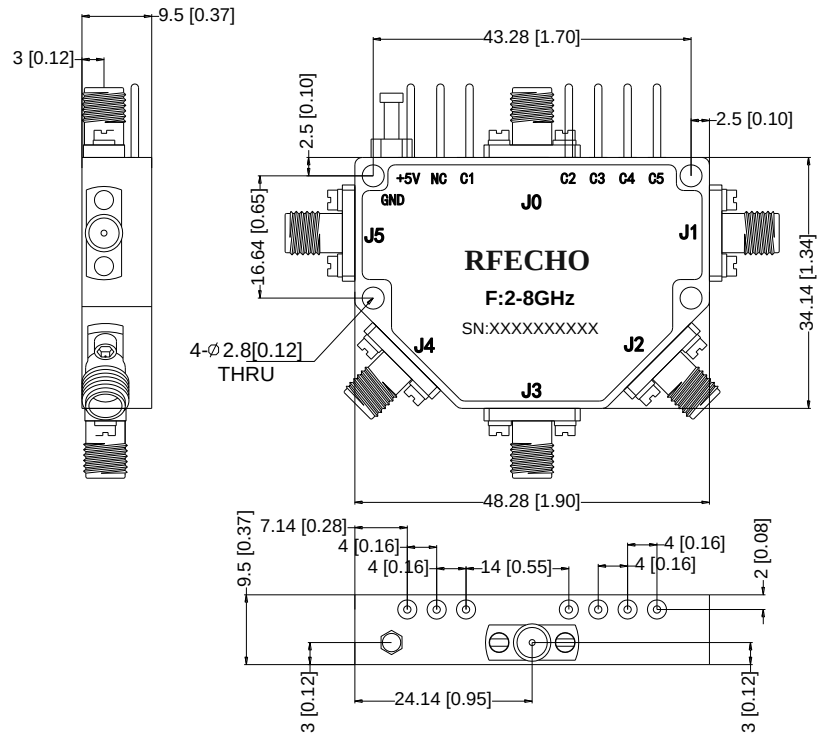
Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH at 40ºc
Shock	20G for 11msec half sine wave,3 axis both directions

Ordering Information

Part No.	Description
DBSR0502000800A	SP5T 2-8GHz PIN Diode Switch

Outline Drawing:

All Dimensions in mm (inches)

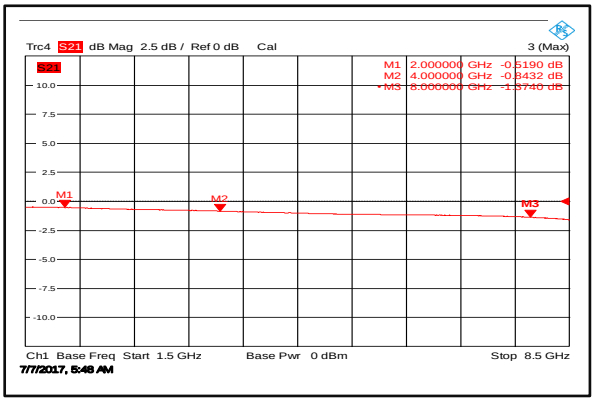


Truth Table

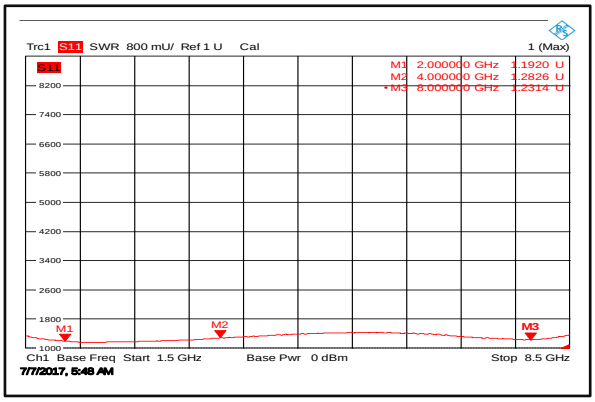
TTL Control Voltage THRESHOLD					Low(0)=0~0.8V
					High(1)=2.8~5V
Control Input TTL					Signal Path State
C5	C4	C3	C2	C1	
1	1	1	1	0	J0-J1
1	1	1	0	1	J0-J2
1	1	0	1	1	J0-J3
1	0	1	1	1	J0-J4
0	1	1	1	1	J0-J5
Control Pin Customization available upon request					

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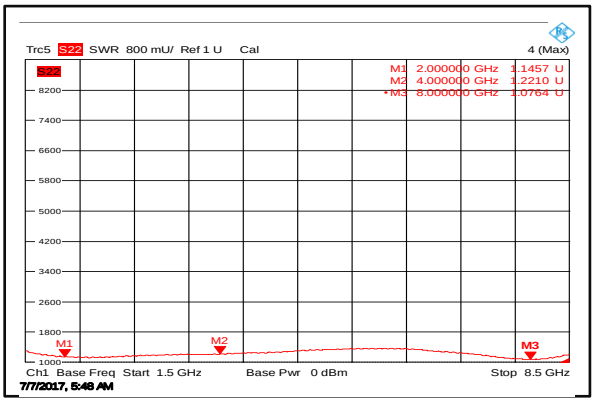
Insertion Loss



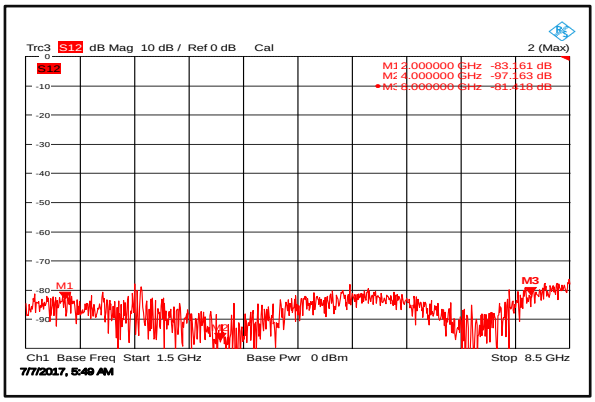
Input VSWR



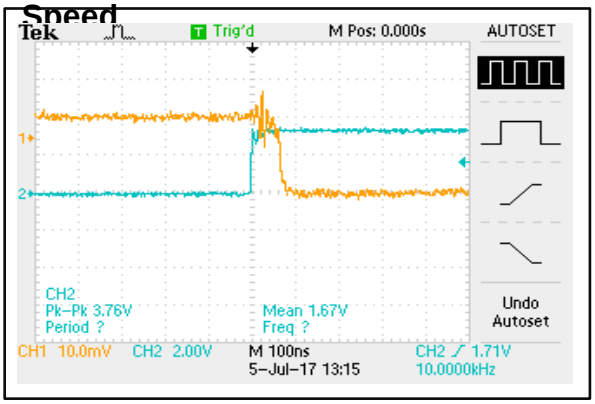
Output VSWR



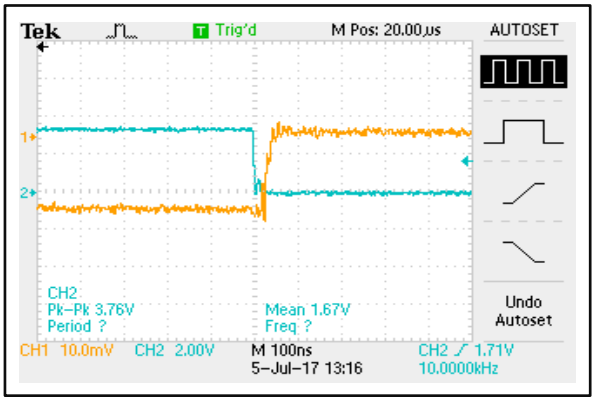
Isolation



Turn on Switching Speed



Turn off Switching Speed



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