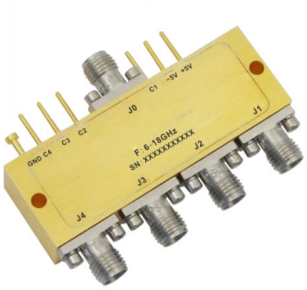
Absorptive 6-18GHz Coaxial SP4T Switch

Features

- Wide Band Operation 6-18GHz
- 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	Min	Typ.	Max	Units
Frequency Range		6-12			12-18		GHz
Insertion Loss		1.7	2.5		2.5	3.2	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ °C
Isolation	60	70		60	65		dB
Input VSWR		1.3	1.5		1.6	1.8	: 1
Output VSWR		1.3	1.5		1.6	1.8	: 1
RF Input power	1				1		W
Power Dissipation (CW)		0.4			0.5		W
0.1dB Compression P0.1dB		30			30		dBm
IM3		40			40		dBc
IIP3		50			45		dBm
Switching Speed		50	100		50	100	ns
Weight	1.21						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±10%/-5V±10%

Environmental Specifications

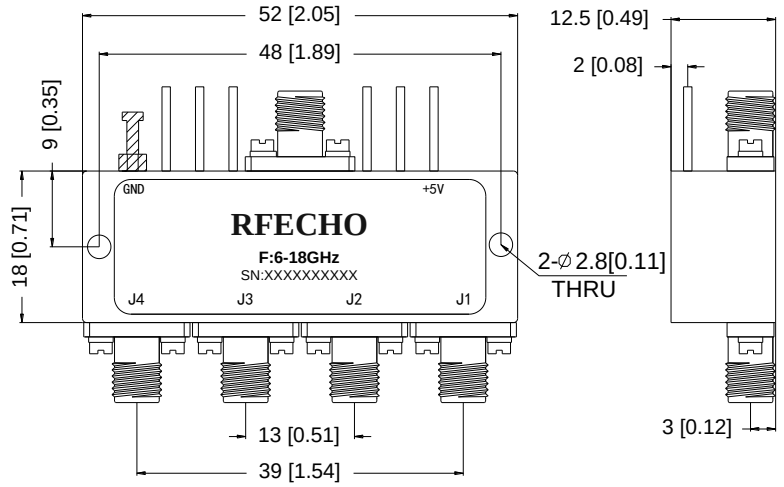
Operational Temperature	-40℃~+85℃ (Case Temperature)
Storage Temperature	-50℃~+105℃
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100%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

Ordering Information

Part No.	Description
DBSA0406001800A	SP4T 6-18GHz PIN Diode Switch

Outline Drawing:

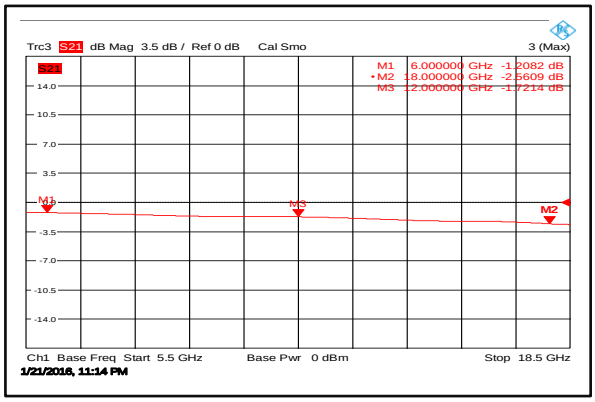
All Dimensions in mm (inches)



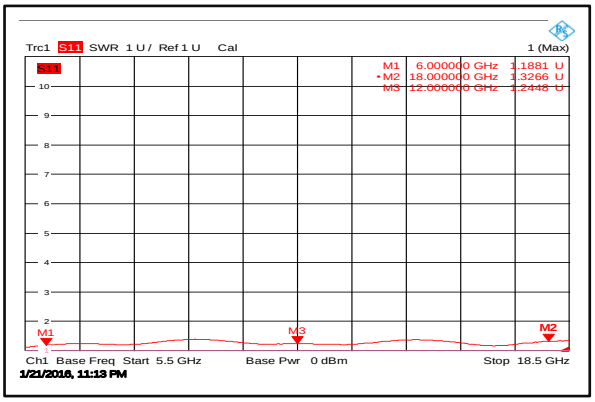
Truth Table

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

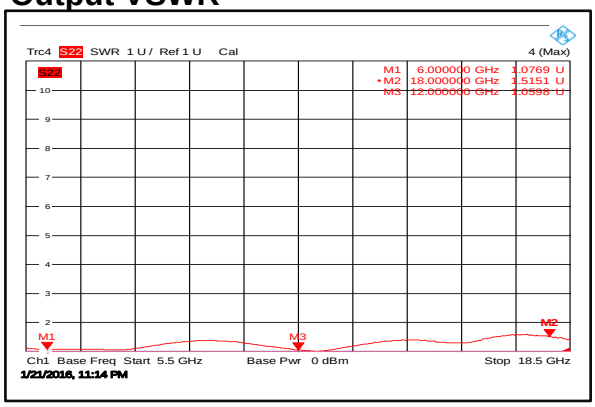
Insertion Loss



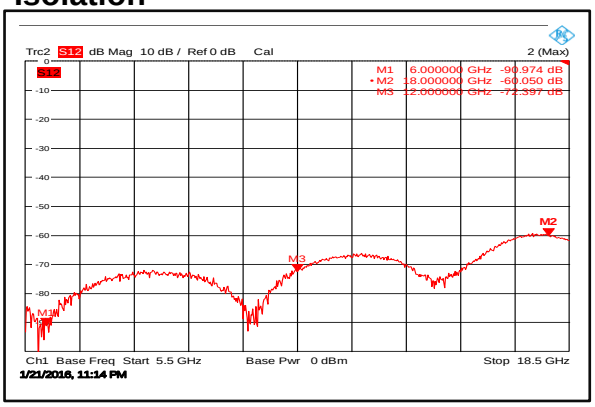
Input VSWR



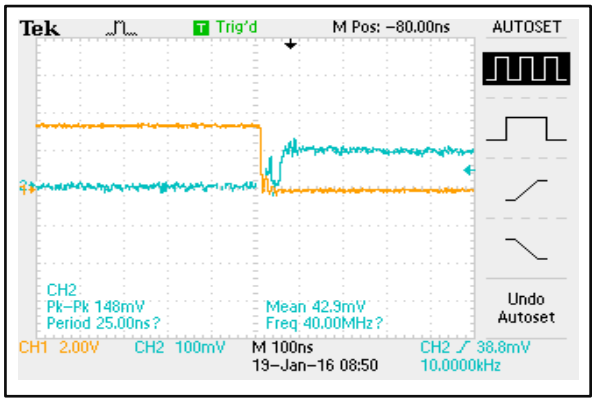
Output VSWR



Isolation



Turn on Switching Speed



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