Absorptive Coaxial SP2T Switch 12 - 18GHz

Features

- Wide Band Operation 12-18GHz
- 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

Parameter	Min.	Typ.	Max.	Units
Frequency Range	12		18	GHz
Insertion Loss		2.5	3.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	60	65		dB
Input VSWR		1.5	1.8	: 1
Output VSWR		1.5	1.8	: 1
RF Input Power (CW)			30	dBm
Power Dissipation		0.4		W
0.1dB Compression Point (P0.1dB)		30		dBm
IIP3		55		dBm
Switching Speed		50	100	ns
Weight	0.71			ounces
Impedance	50			Ohms
Bias Current (+5V/-5V)	60/30			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%/-5V±10%

Environmental Specifications

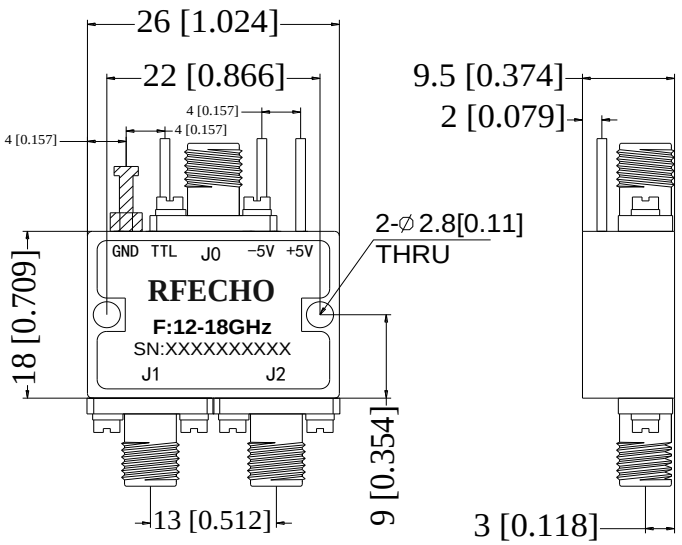
Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH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

Ordering Information

Part No.	Description
DBSA0212001800A	SP2T 12-18GHz PIN Diode Switch

Outline Drawing:

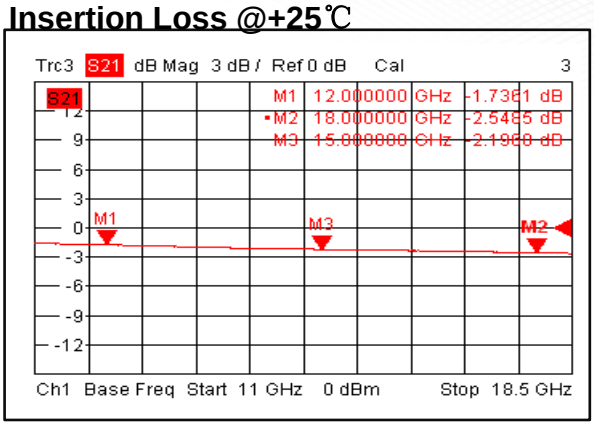
All Dimensions in mm (inches)



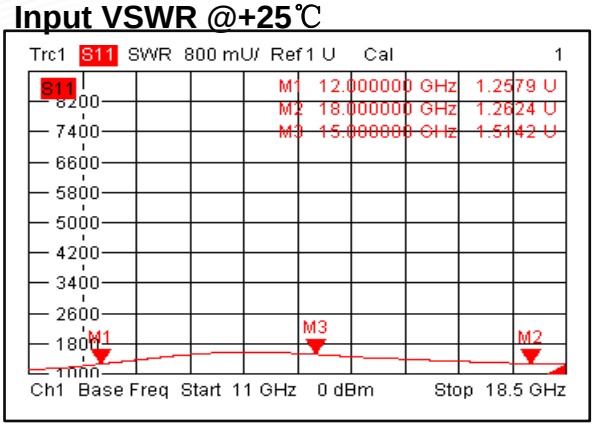
Truth Table

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

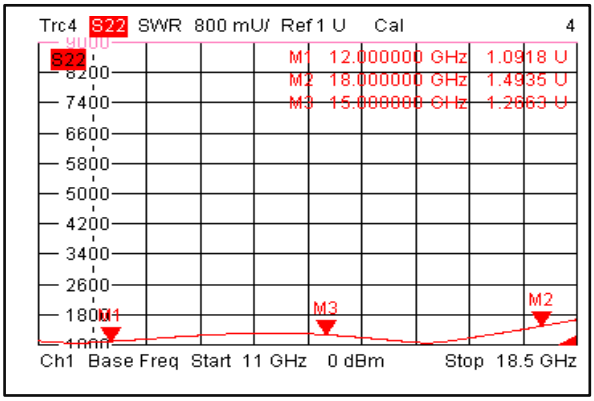
Insertion Loss @+25℃



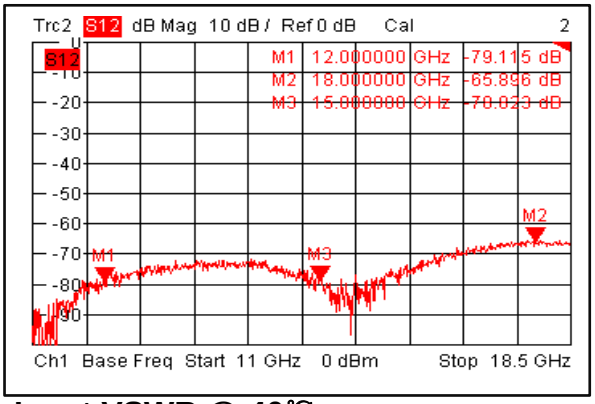
Input VSWR @+25℃



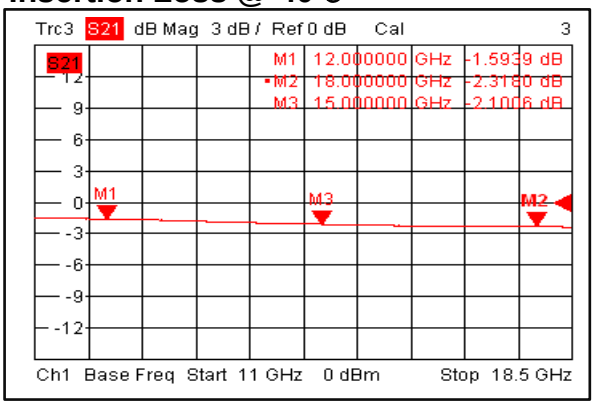
Output VSWR @+25℃



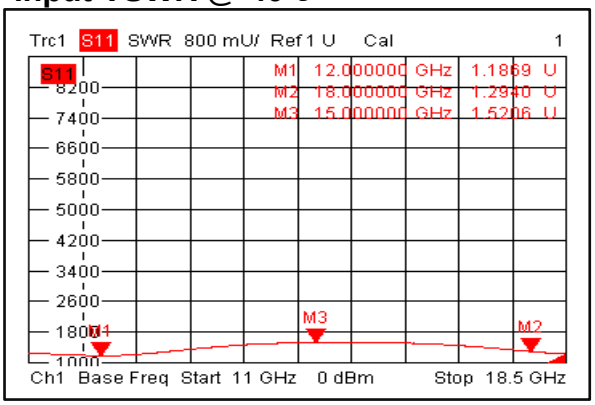
Isolation @+25℃



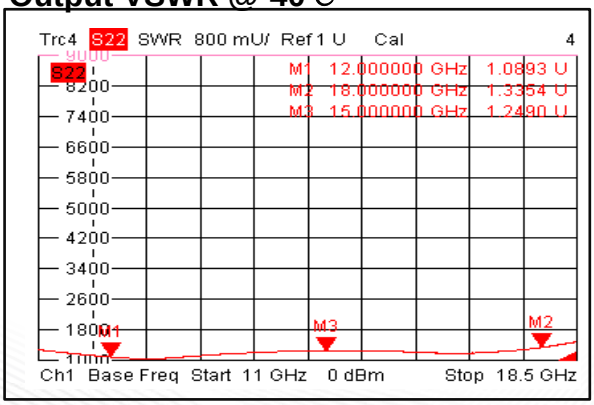
Insertion Loss @-40℃



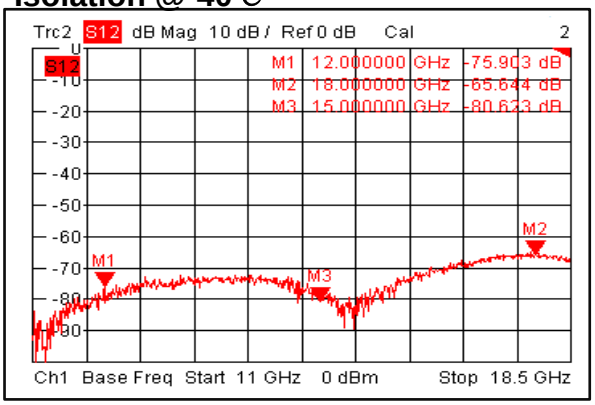
Input VSWR @-40℃



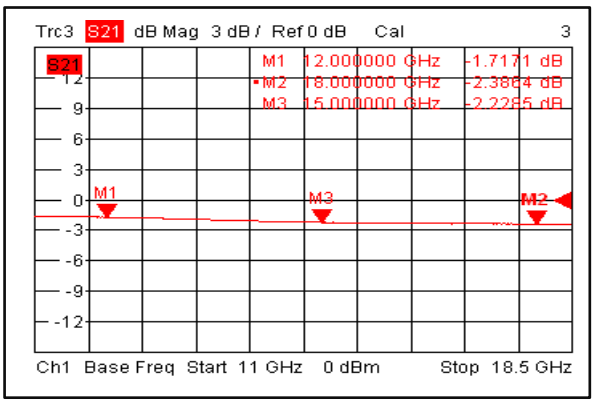
Output VSWR @-40℃



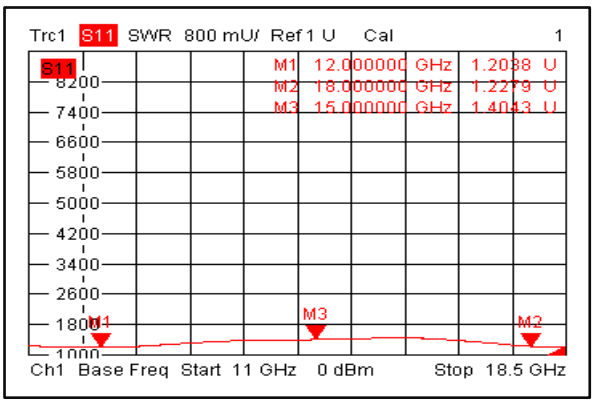
Isolation @-40℃



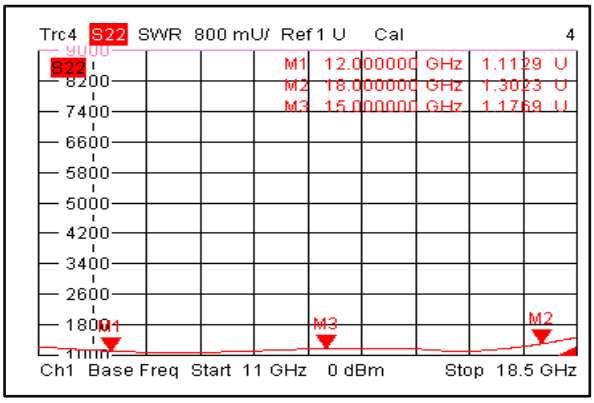
Insertion Loss @+85℃



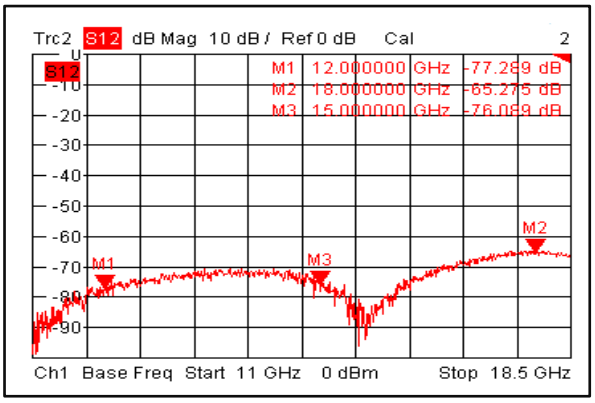
Input VSWR @+85℃



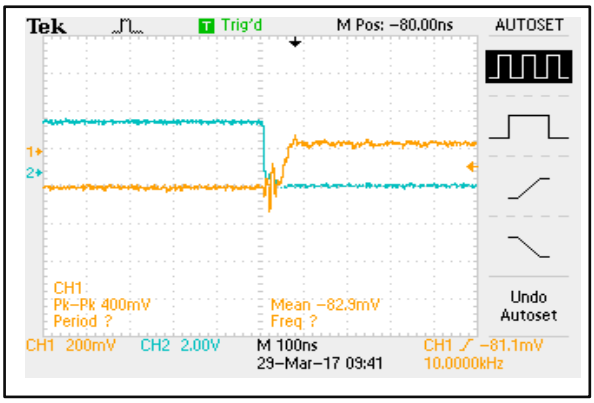
Output VSWR @+85℃



Isolation @+85℃



Switching Speed



Switching Speed