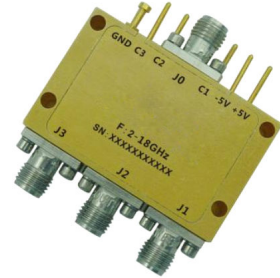




# Absorptive Coaxial SP3T Switch 2 - 18GHz

## Features

- Wide Band Operation 2-18GHz
- 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.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	2~6			6~12			12~18			GHz
Insertion Loss		1.5	2.0		2.5	3.0		3.0	3.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ ° C
Isolation	70	75		65	70		60	65		dB
Input VSWR		1.5	1.8		1.5	1.8		1.5	1.8	: 1
Output VSWR		1.5	1.8		1.5	1.8		1.5	1.8	: 1
RF Input power			30			30			30	dBm
DC Power Dissipation		0.65			0.65			0.65		W
0.1dB Compression Point ( P0.1dB )		30			30			30		dBm
IIP3		45			41			40		dBm
Switching Speed	100 Max.									ns
Weight	1.2 Max.									Ounces
Impedance	50									Ω
Bias Current (+5V/-5V)	80/50 Max.									mA
Input / Output Connectors	SMA-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									



### Absolute Maximum Ratings

Biassing	+5V±10%/-5V±10%
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### Ordering Information

Part No.	Description
DBSA0302001800A	SP3T 2-18GHz 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

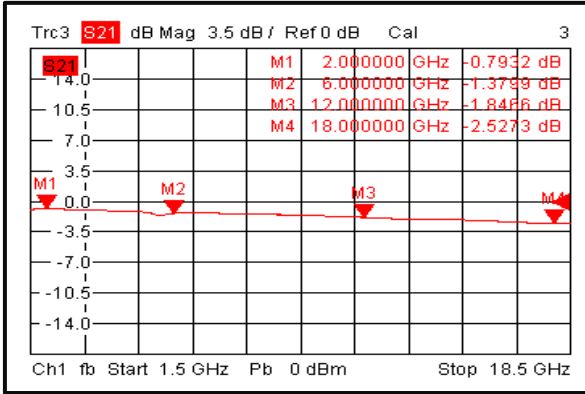
### Outline Drawing:

All Dimensions in mm (inches) Housing Tolerances ±0.1 (0.004)

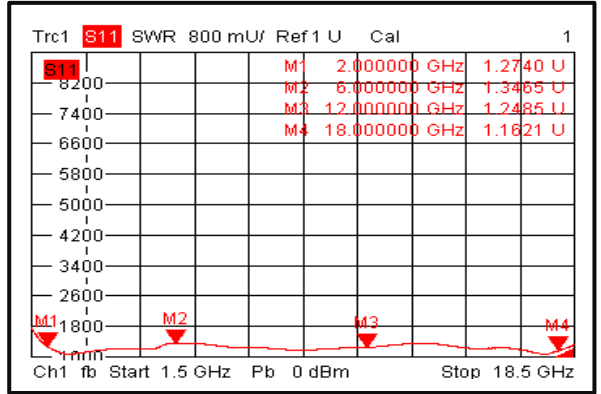
TTL Control Voltage			Low(0)=0~0.8V
Control Input TTL			High(1)=2.8~5V
C3	C2	C1	Signal Path State
1	1	1	Not Used
0	0	1	J0-J1
0	1	0	J0-J2
1	0	0	J0-J3
0	0	0	OFF
Control Pin Customization available upon request			



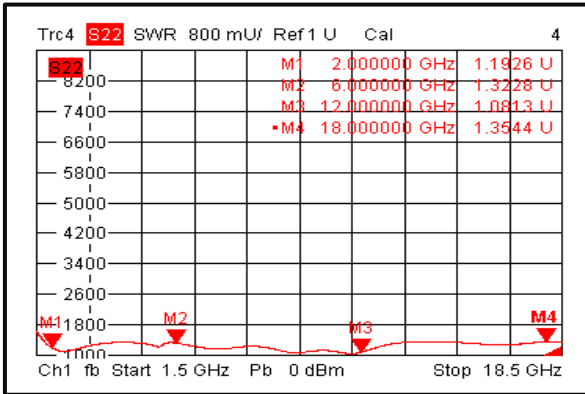
### Insertion Loss @+25°C



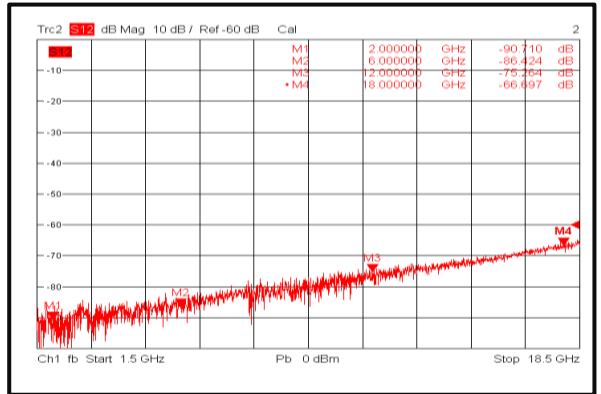
### Input VSWR @+25°C



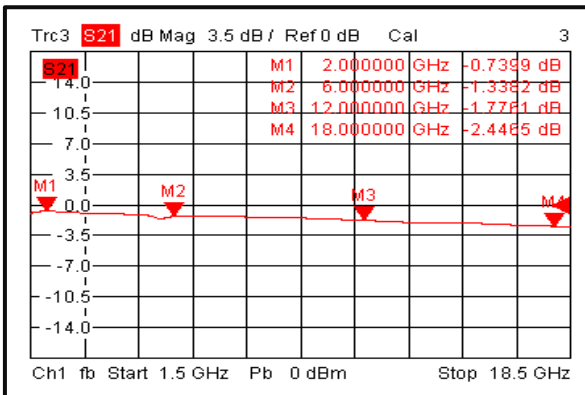
### Output VSWR @+25°C



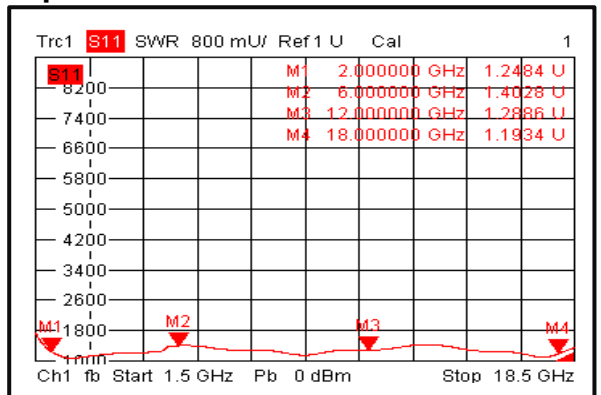
### Isolation @+25°C



### Insertion Loss @-40°C

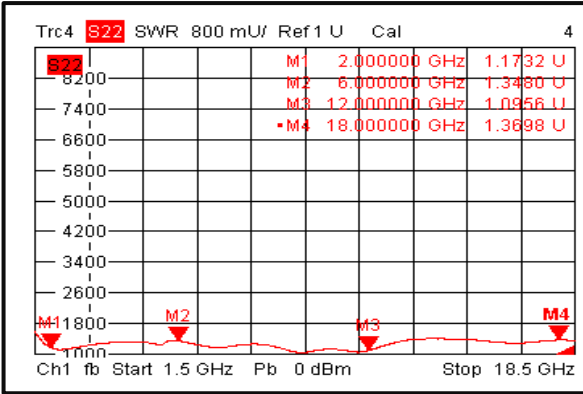


### Input VSWR @-40°C

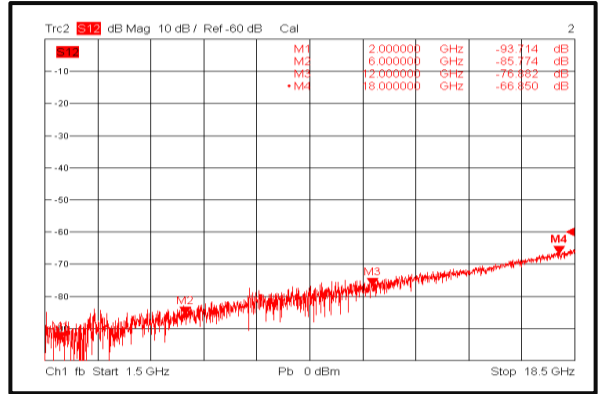




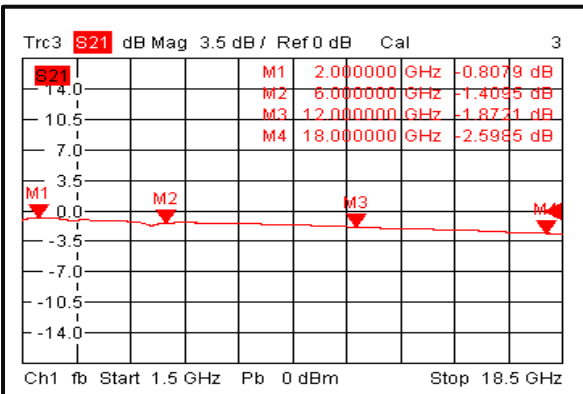
### Output VSWR @-40°C



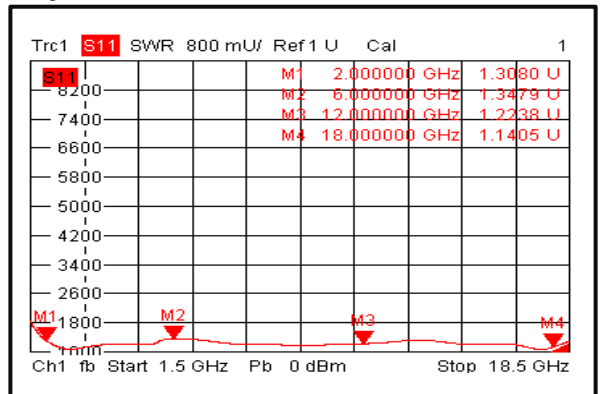
### Isolation @-40°C



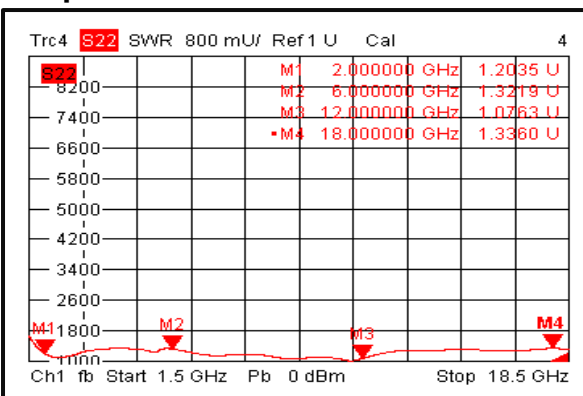
### Insertion Loss @+85°C



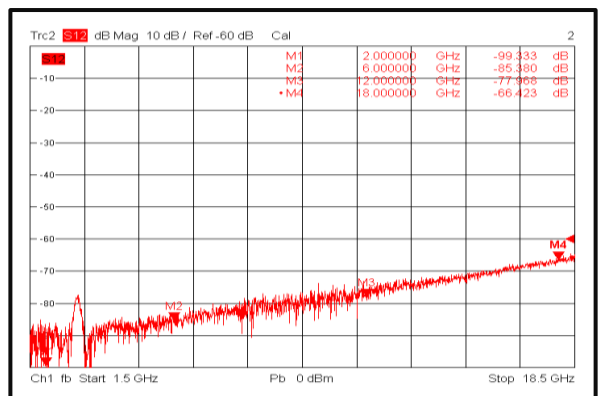
### Input VSWR @+85°C



### Output VSWR @+85°C

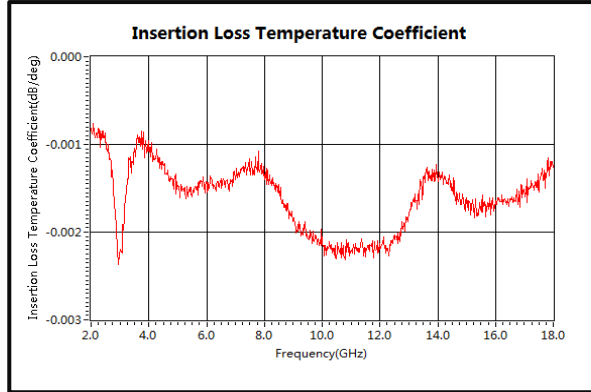


### Isolation @+85°C

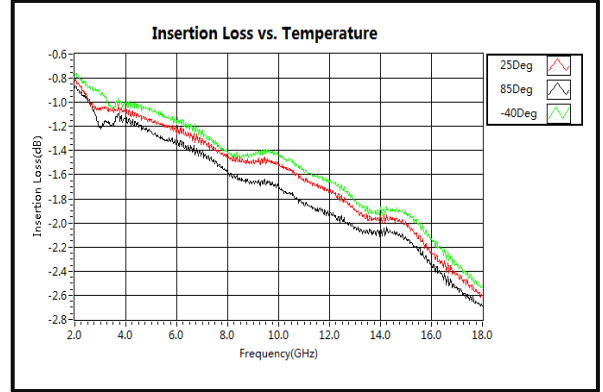




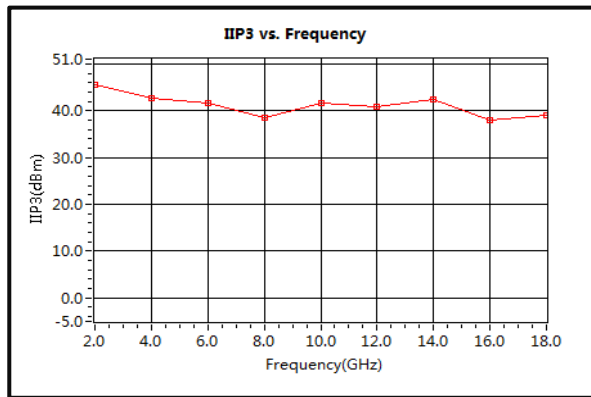
### Insertion Loss Temperature Coefficient



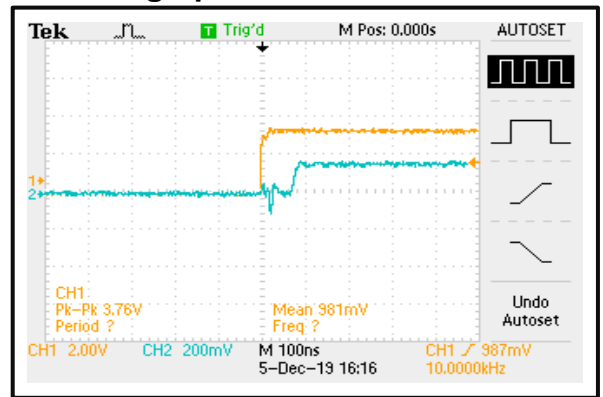
### Insertion Loss vs. Temperature



### IIP3



### Switching Speed



### Switching Speed

