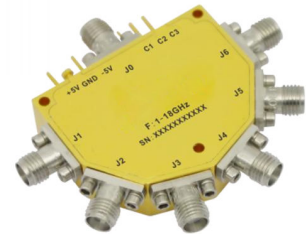




Absorptive 1-18GHz Coaxial SP6T Switch

Features

- Ultra Wide Band Operation 1-18GHz
- 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.	Min.	Typ.	Max.	Units
Frequency Range	1-8			8-12			12-18			GHz
Insertion Loss		1.4	1.8		2	2.5		3.3	3.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ °C
Isolation	60	75		60	70		56	58		dB
Input VSWR		1.5	2.0		1.5	2.0		1.5	2.0	: 1
Output VSWR		1.5	2.0		1.5	2.0		1.5	2.0	: 1
RF Input Power			30			30			30	dBm
DC Power Dissipation		1.1			1.1			1.1		W
0.1dB Compression Point (P0.1dB)		30			30			30		dBm
IIP3		55			55			55		dBm
Switching Speed			100			100			100	ns
Weight	1.41									Ounces
Impedance	50									Ω
Bias Current (+5V / -5V)	240 / 50									mA
Input / Output Connectors	SMA-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Epoxy Sealed (Standard) Hermetically Sealed (Optional)									



Absolute Maximum Ratings

Biasing	+5V ± 10%/-5V ± 10%
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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

Ordering Information

Part No.	Description
DBSA0601001800B	SP6T 1-18GHz PIN Diode Switch

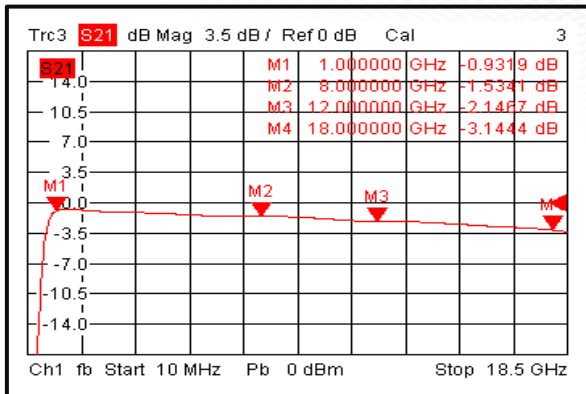
Outline Drawing:

All Dimensions in mm (inches)

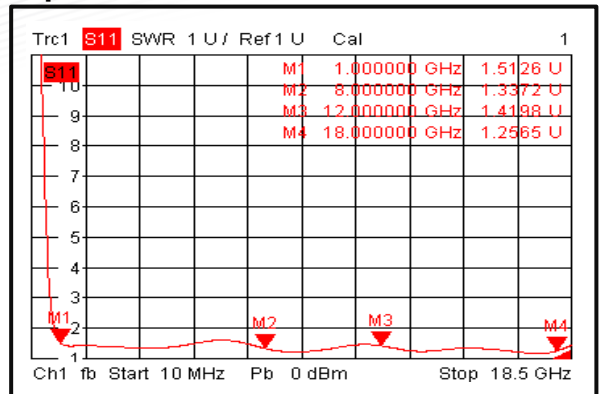
TTL Control Voltage THRESHOLD			Low(0)=0~0.8V
Control Input TTL			High(1)=2.8~5V
C3	C2	C1	Signal Path State
0	0	0	J0-J1
0	0	1	J0-J2
0	1	0	J0-J3
0	1	1	J0-J4
1	0	0	J0-J5
1	0	1	J0-J6
1	1	0	OFF
1	1	1	OFF
Control Pin Customization available upon request			



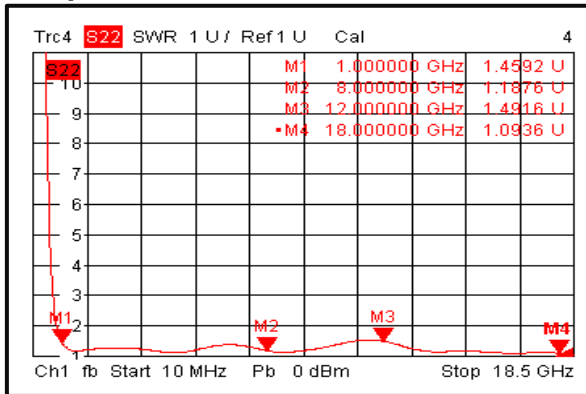
Insertion Loss @+25°C



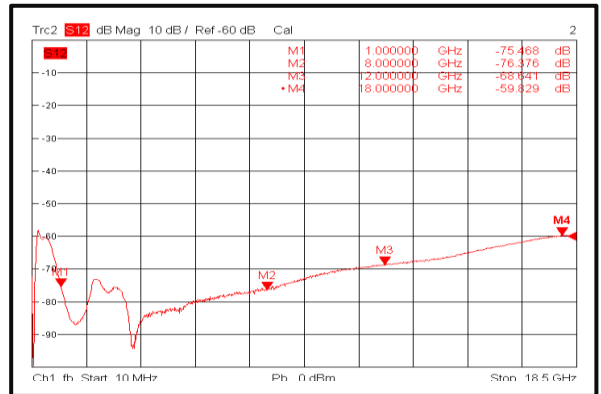
Input VSWR @+25°C



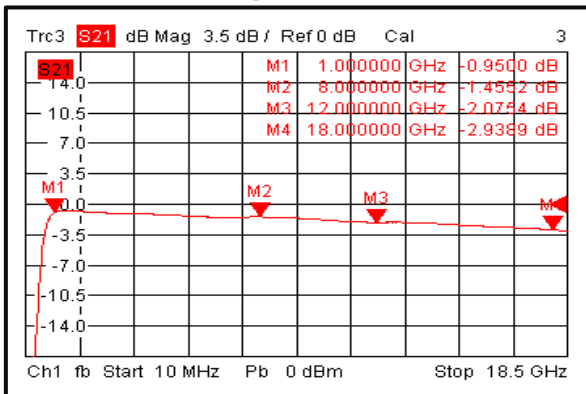
Output VSWR @+25°C



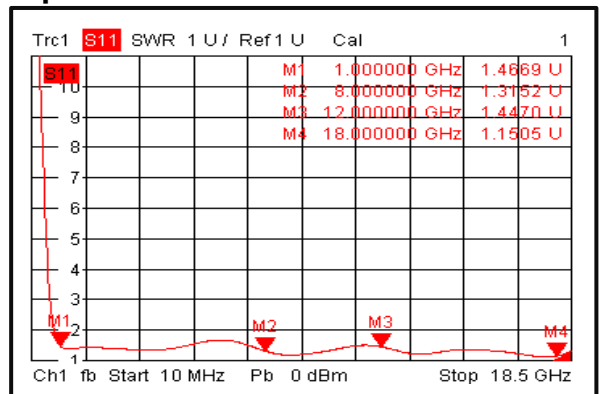
Isolation @+25°C



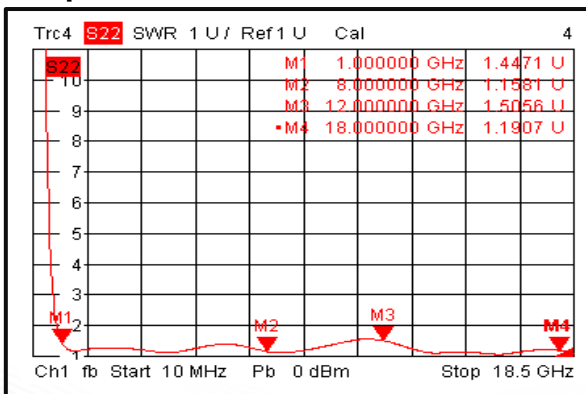
Insertion Loss @-40°C



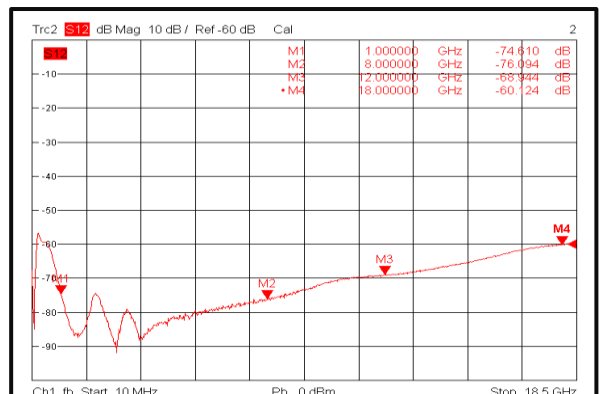
Input VSWR @-40°C



Output VSWR @-40°C

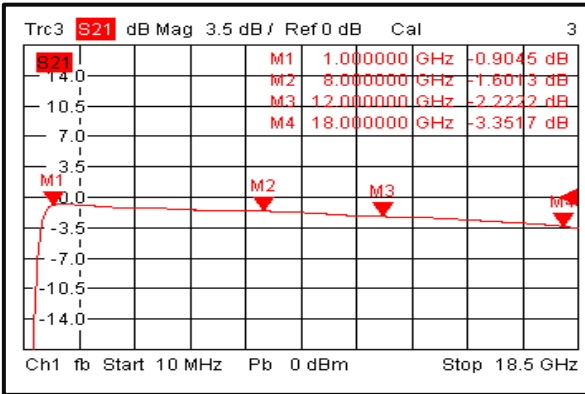


Isolation @-40°C

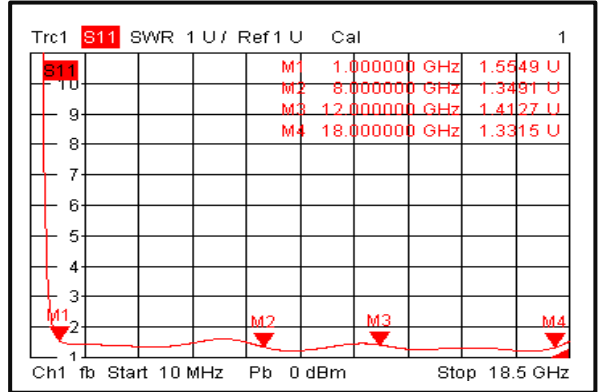




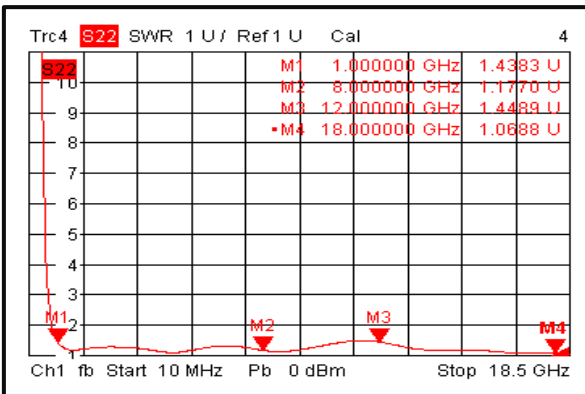
Insertion Loss @+85°C



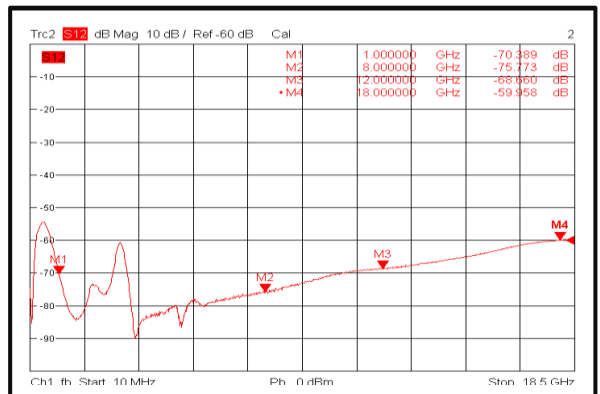
Input VSWR @+85°C



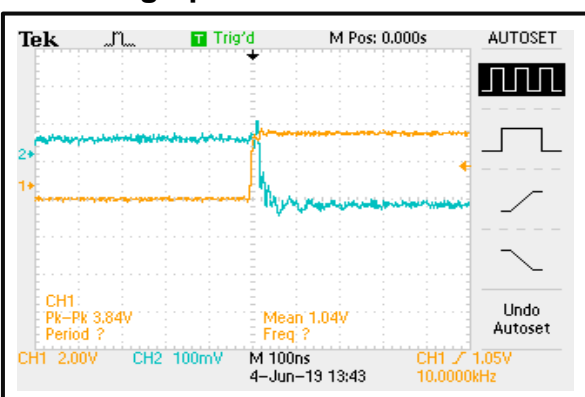
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

