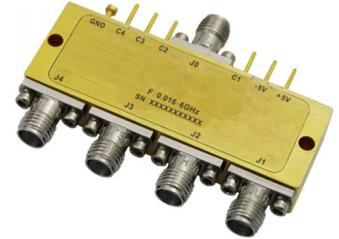




Absorptive Coaxial SP4T Switch 0.016-6GHz

Features

- Ultra Wide Band Operation 0.016-6GHz
- 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	0.016		3	3		6	GHz
Insertion Loss		1.4	1.8		2.6	3.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ °C
Isolation	60	70		60	75		dB
Input VSWR		1.3	1.5		1.3	1.5	: 1
Output VSWR		1.3	1.5		1.3	1.5	: 1
RF Input power(CW)			30			30	dBm
DC Power Dissipation		0.8			0.8		W
0.1dB Compression Point (P0.1dB)		30			30		dBm
IIP3		55			55		dBm
Switching Speed			1			1	us
Weight	1.06						Ounces
Impedance	50						Ω
Bias Current (+5V / -5V)	160/50						mA
Input / Output Connectors	SMA-Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (Optional)						



Absolute Maximum Ratings

Biasing	+5V $\pm$ 10%/-5V $\pm$ 10%
---------	-----------------------------

Ordering Information

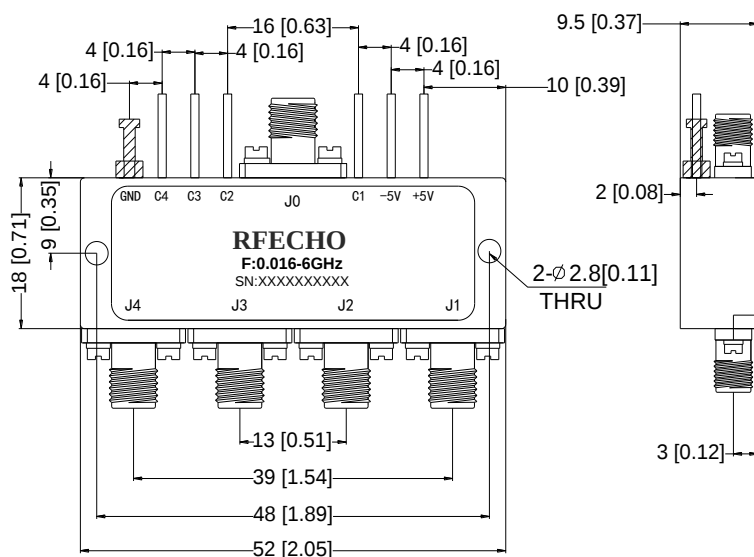
Part No.	Description
DBSA0400010600A	SP4T 0.016-6GHz PIN Diode Switch

Environmental Specifications

Operational Temperature	-40°C~+85°C (Case Temperature)
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)

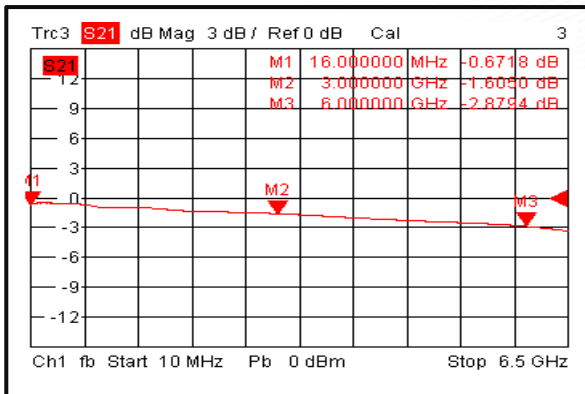


Truth Table

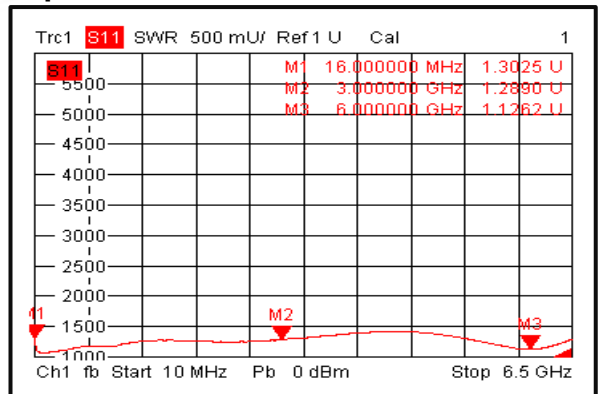
TTL Control Voltage THRESHOLD				Low(0)=0~0.8V
Control Input TTL				High(1)=2.8~5V
C4	C3	C2	C1	Signal Path State
1	1	1	1	OFF
1	1	1	0	J0-J1
1	1	0	1	J0-J2
1	0	1	1	J0-J3
0	1	1	1	J0-J4
0	0	0	0	not used
Control Pin Customization available upon request				



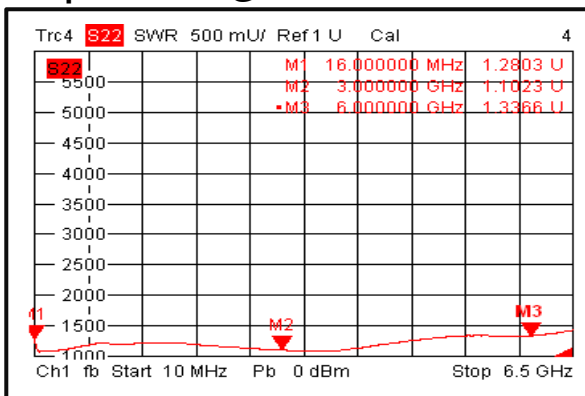
Insertion Loss @+25°C



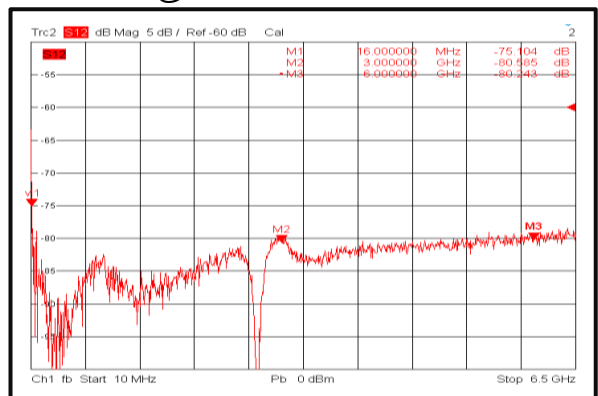
Input VSWR @+25°C



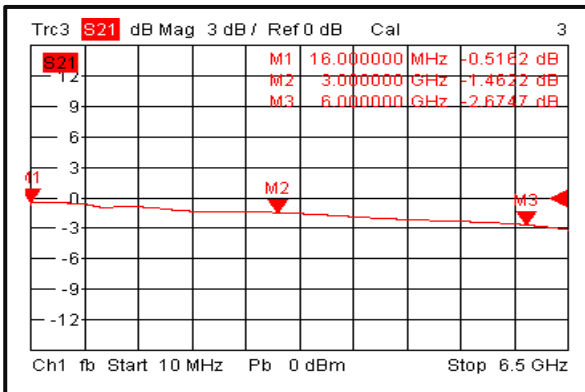
Output VSWR @+25°C



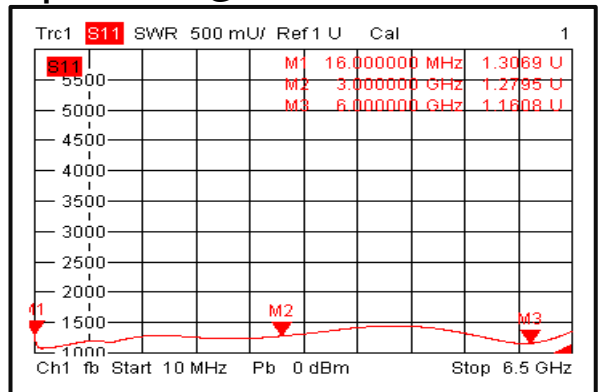
Isolation @+25°C



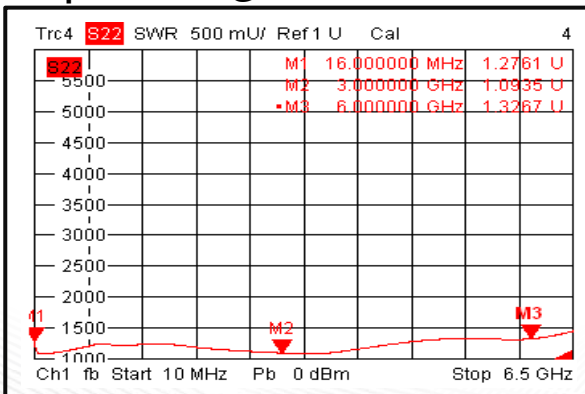
Insertion Loss @-40°C



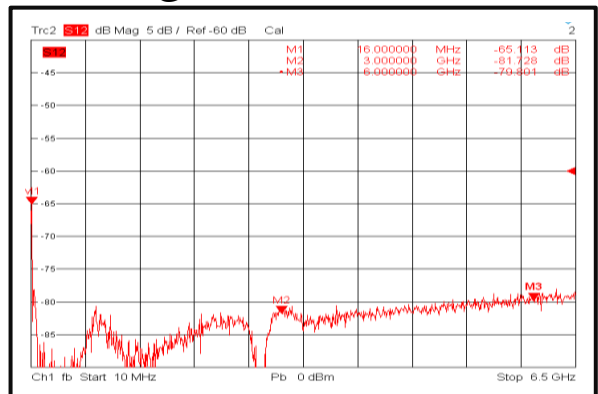
Input VSWR @-40°C



Output VSWR @-40°C

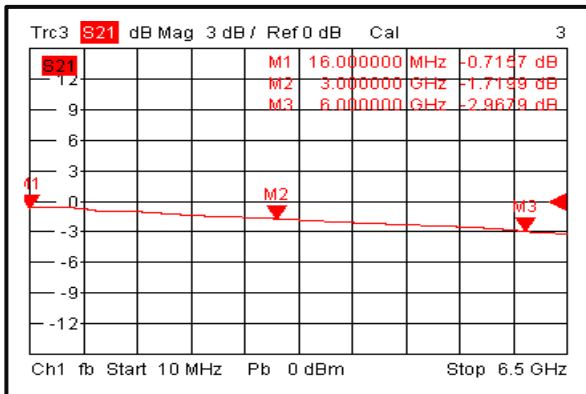


Isolation @-40°C

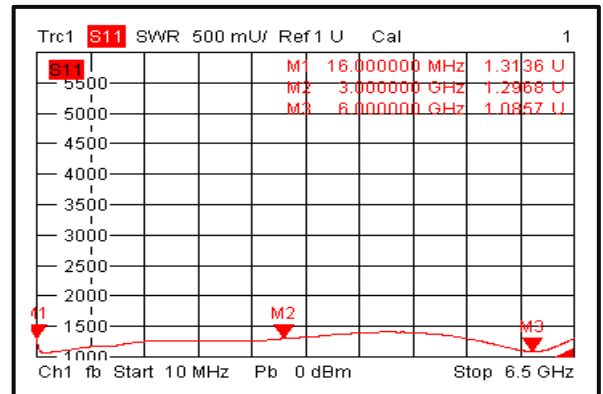




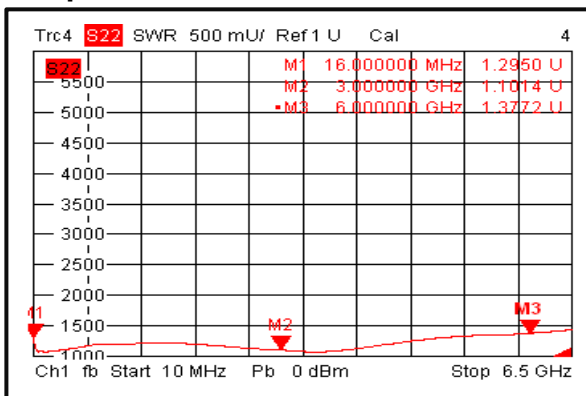
Insertion Loss @+85°C



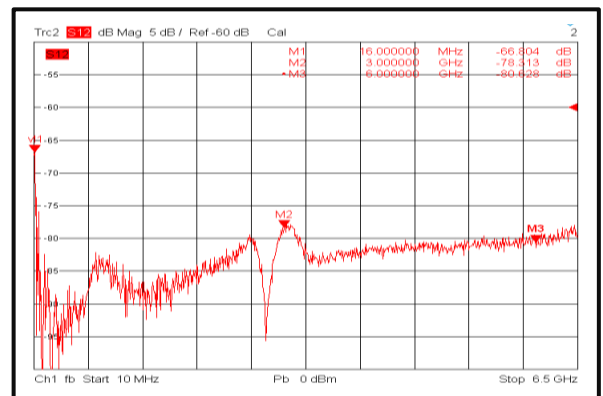
Input VSWR @+85°C



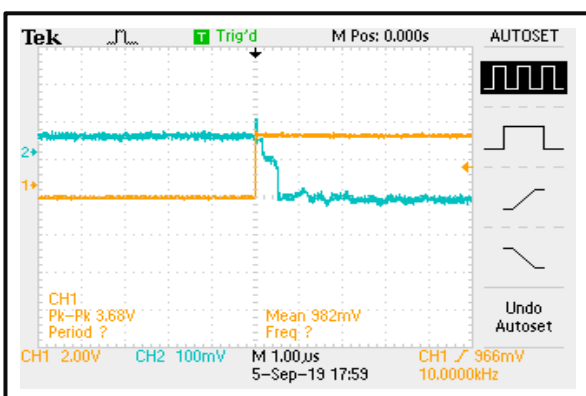
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

