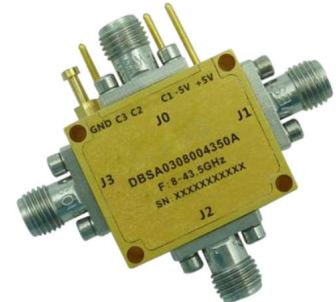




# Absorptive Coaxial SP3T Switch 8 - 43.5GHz

## Features

- Wide Band Operation 8-43.5GHz
- 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.	Units
Frequency Range	8-26		26-43.5				GHz
Insertion Loss		3	3.5		3.5	4	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ ° C
Isolation	50	53		42	50		dB
Input VSWR		2	2.5		2	2.5	: 1
Output VSWR		2	2.5		2	2.5	: 1
RF Input Power Pulse 10% Duty cycle (10us)			+23			+23	dBm
DC Power Dissipation		0.9			0.9		W
0.1dB Compression Point ( P0.1dB )		23			23		dBm
IIP3		50			45		dBm
Switching Speed		50	100		50	100	ns
Weight	0.71						Ounces
Impedance	50						Ω
Bias Current ( +5V / -5V )	130/50						mA
Input / Output Connectors	2.92mm-Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (Optional)						



### Absolute Maximum Ratings

Biasing	+5V±10%/-5V±10%
---------	-----------------

### 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
DBSA0308004350A	SP3T 8-43.5PIN Diode Switch

### Outline Drawing:

All Dimensions in mm (inches)

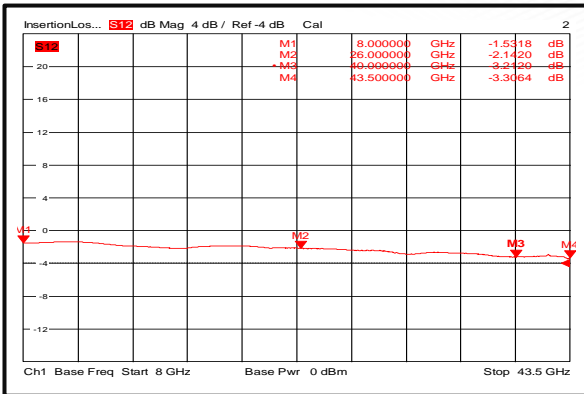
The drawing shows a top-down view of the switch with dimensions in mm [inches]. Key dimensions include: overall width 24 [0.94], mounting hole diameter 4-Ø 2.2 [0.09] THRU, and various pin spacings such as 3.3 [0.13] and 6.3 [0.25]. Pin labels include GND, C3, C2, C1, -5V, +5V, J0, J1, J2, and J3. The device is labeled 'RFECHO F:8-43.5GHz SN:XXXXXXXXXX'.

TTL Control Voltage THRESHOLD		Low(0)=0~0.8V	
		High(1)=2.8~5V	
Control Input TTL			Signal Path State
C3	C2	C1	
1	1	0	J0-J1
1	0	1	J0-J2
0	1	1	J0-J3
0	0	0	Undefined
1	1	1	All OFF

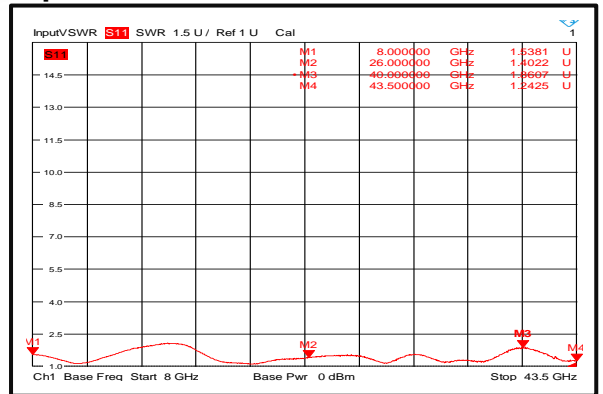
Control Pin Customization available upon request



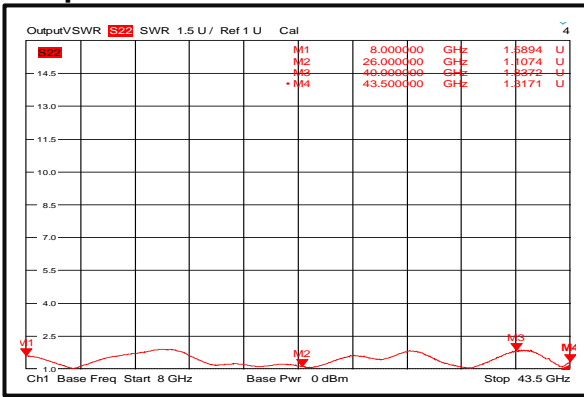
### Insertion Loss @+25°C



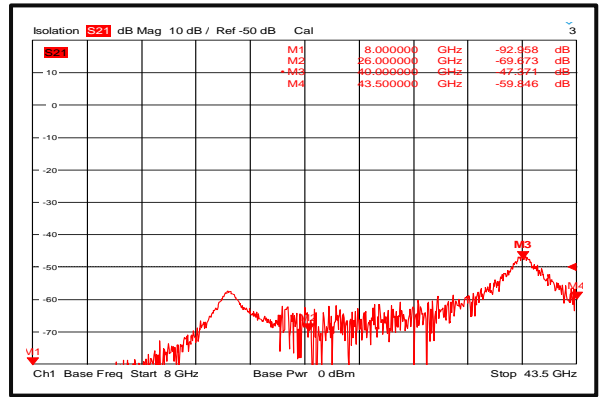
### Input VSWR @+25°C



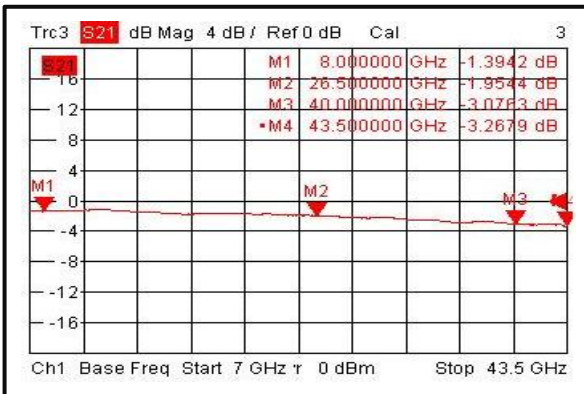
### Output VSWR @+25°C



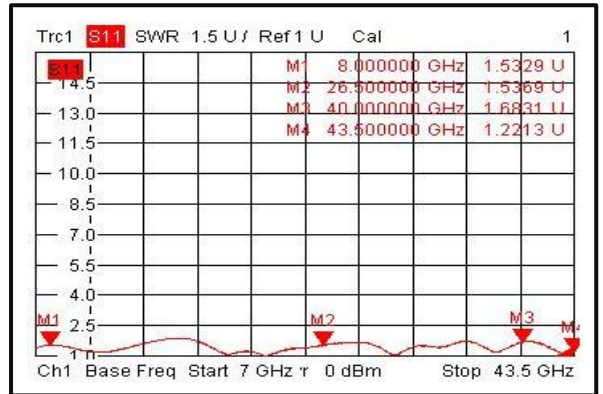
### Isolation @+25°C



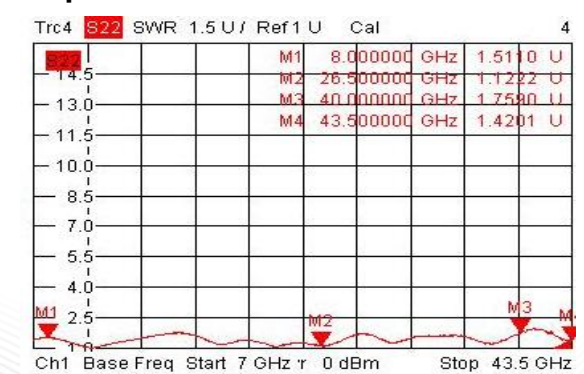
### Insertion Loss @-40°C



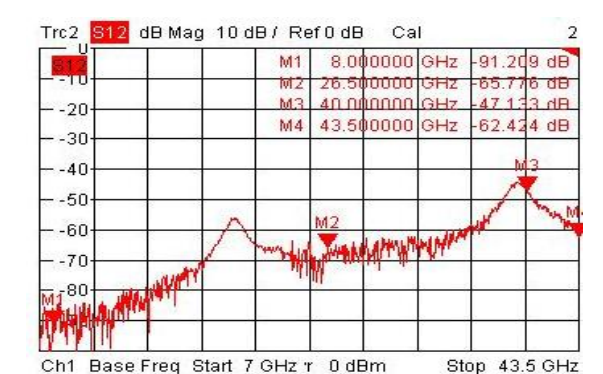
### Input VSWR @-40°C



### Output VSWR @-40°C

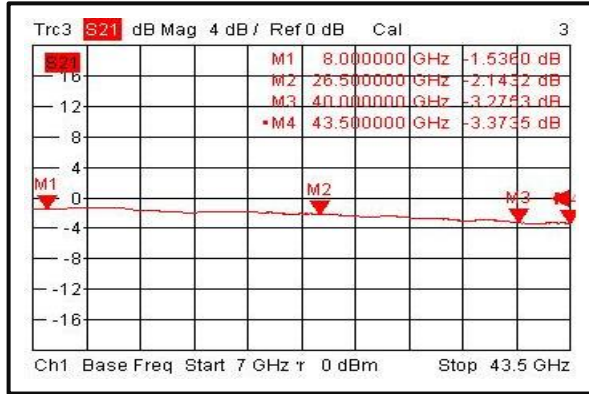


### Isolation @-40°C

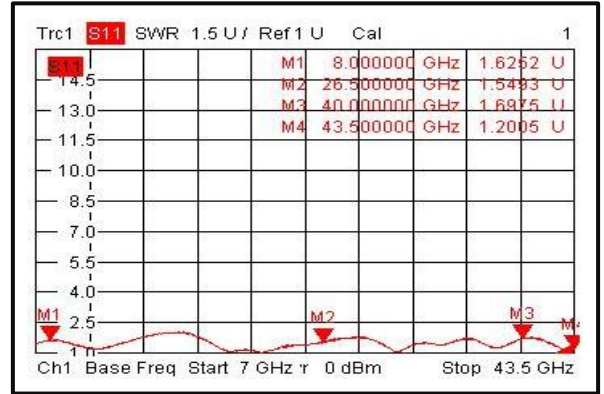




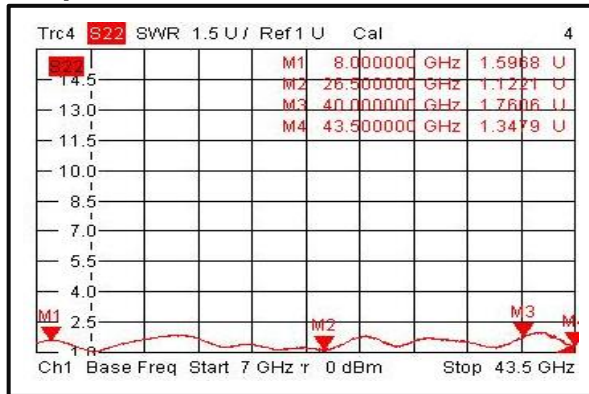
### Insertion Loss @+85°C



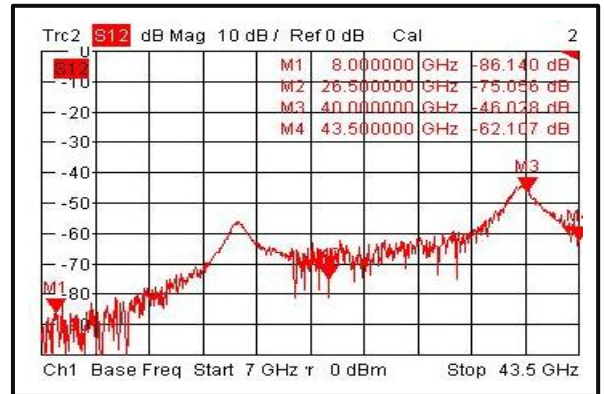
### Input VSWR @+85°C



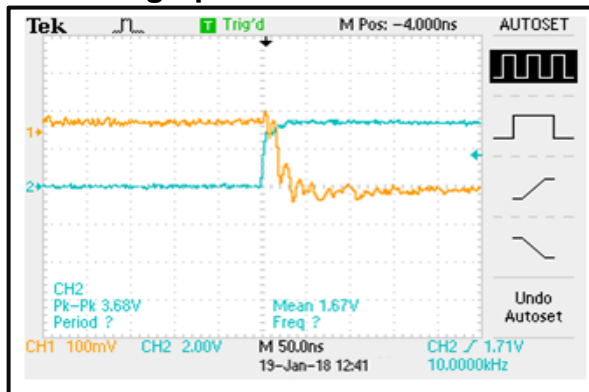
### Output VSWR @+85°C



### Isolation @+85°C



### Switching Speed



### Switching Speed

