



# Reflective 1.34-1.4GHz Coaxial SP2T Switch

## Features

- Wide Band Operation 1.34-1.4GHz
- TTL compatible driver include
- 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	Units
Frequency Range	1.34		1.4	GHz
Insertion Loss		0.4	0.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	80	85		dB
Input VSWR		1.2	1.3	: 1
Output VSWR		1.2	1.3	: 1
RF Input Power (CW)			30	dBm
DC Power Dissipation		0.5		W
0.1dB Compression Point (P0.1dB)		30		dBm
IIP3		49		dBm
Switching Speed	100Max.			ns
Weight	0.75 Max.			ounces
Impedance	50			$\Omega$
Biasing Current (+5V)	150 Max.			mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



### Absolute Maximum Ratings

Biasing	+5V±10%
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### Environmental Specifications

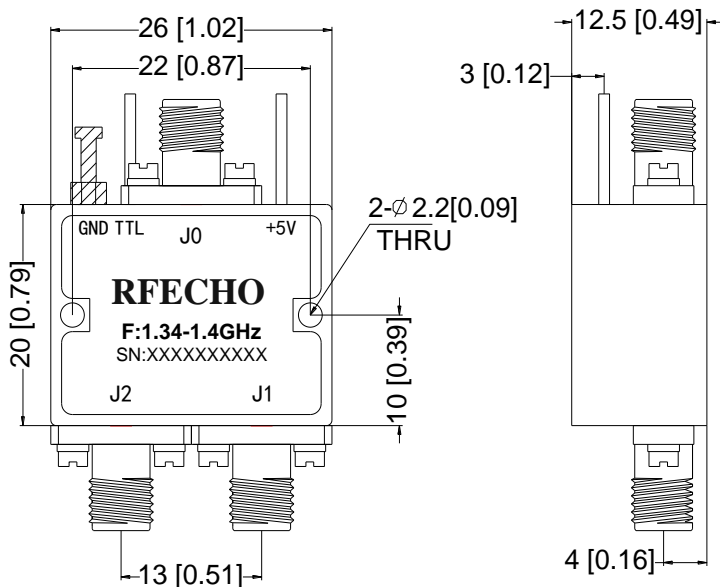
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

### Ordering Information

Part No.	Description
DBSR0201340140A	SP2T 1.34-1.4GHz PIN Diode Switch

### Outline Drawing:

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

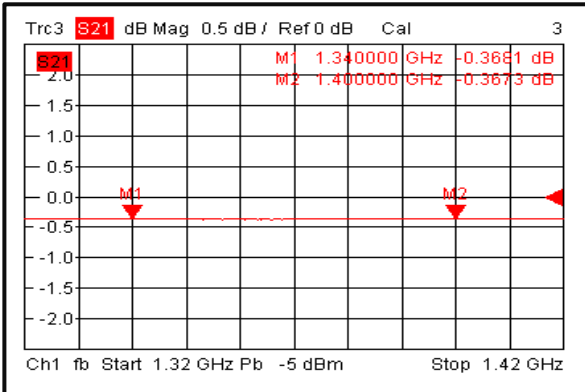


### Truth Table

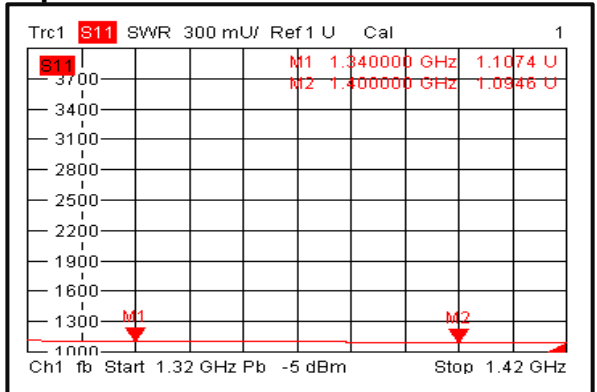
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
0	J0-J1
1	J0-J2
Control Pin Customization available upon request	



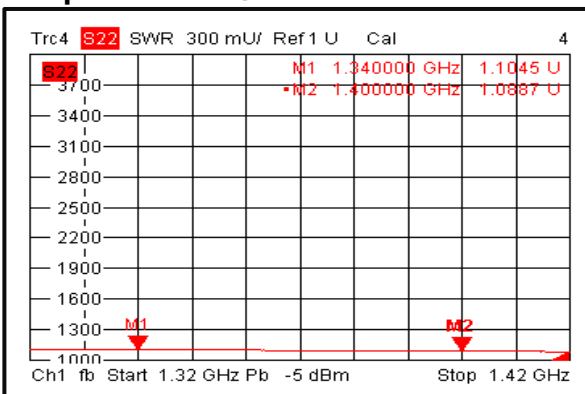
### Insertion Loss @+25°C



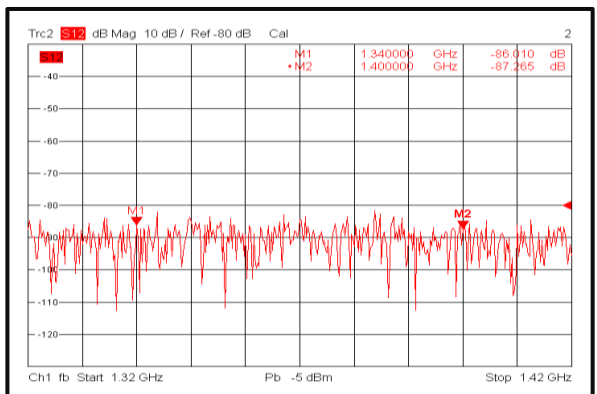
### Input VSWR @+25°C



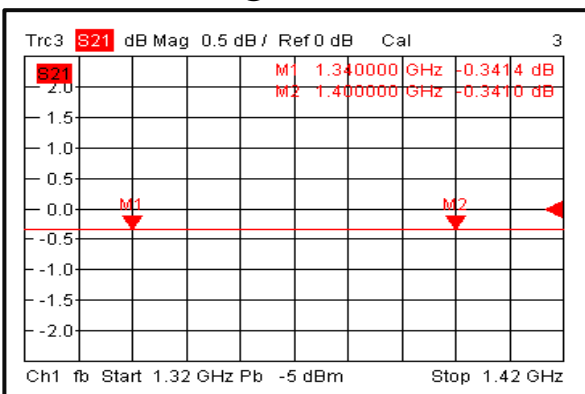
### Output VSWR @+25°C



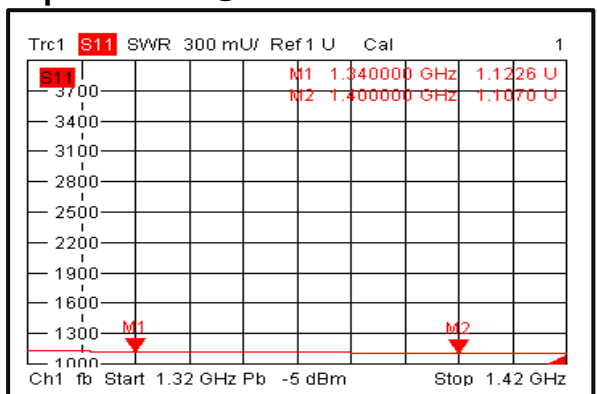
### Isolation @+25°C



### Insertion Loss @-40°C

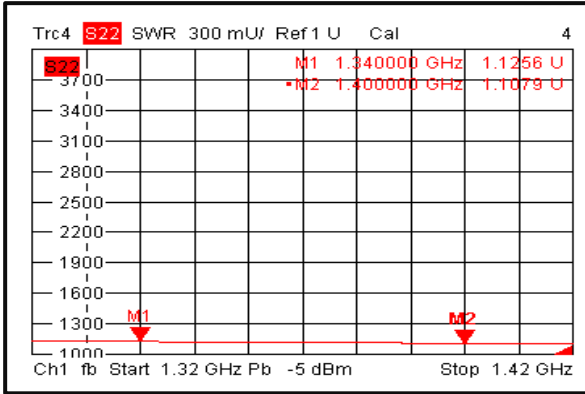


### Input VSWR @-40°C

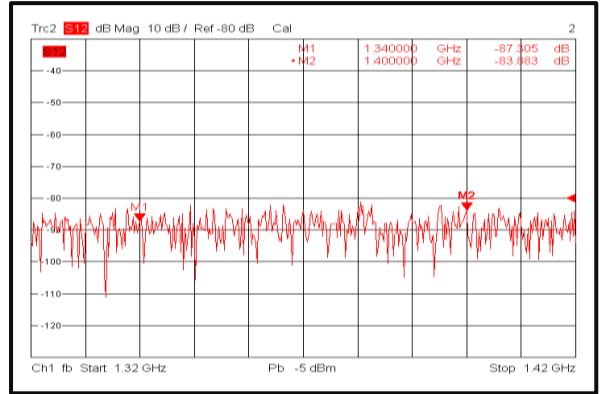




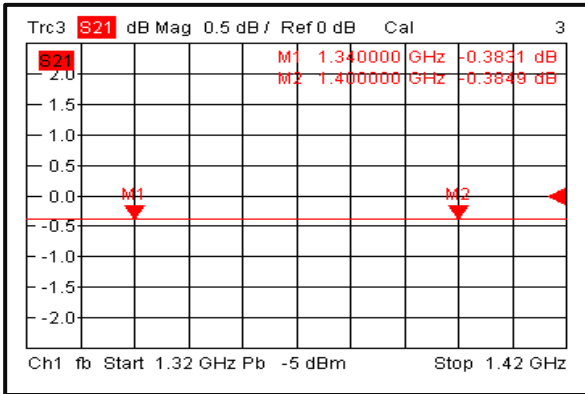
### Output VSWR @-40°C



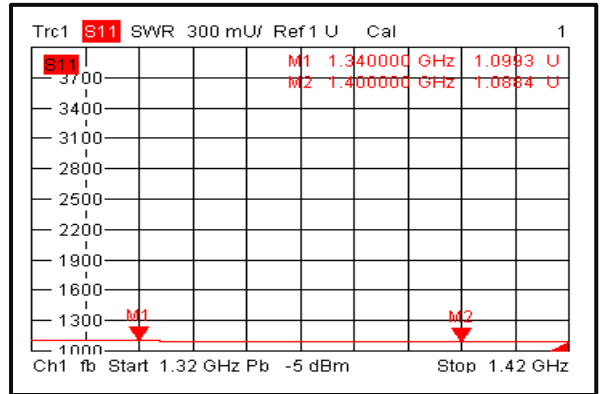
### Isolation @-40°C



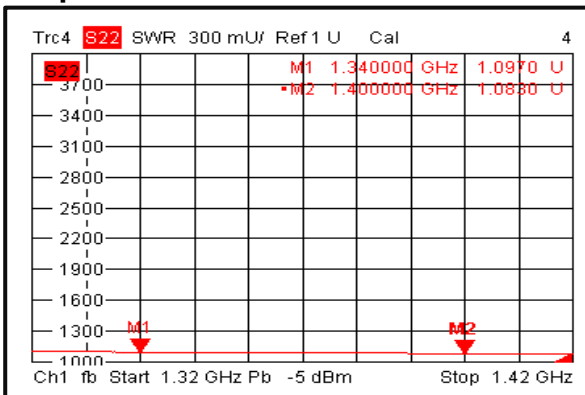
### Insertion Loss @+85°C



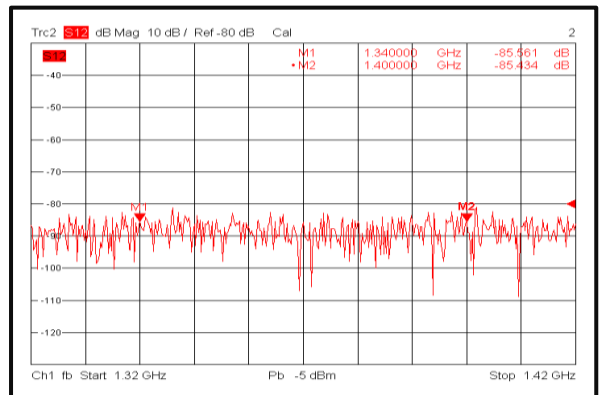
### Input VSWR @+85°C



### Output VSWR @+85°C

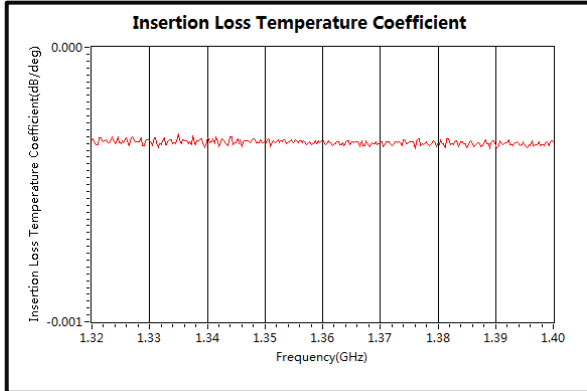


### Isolation @+85°C

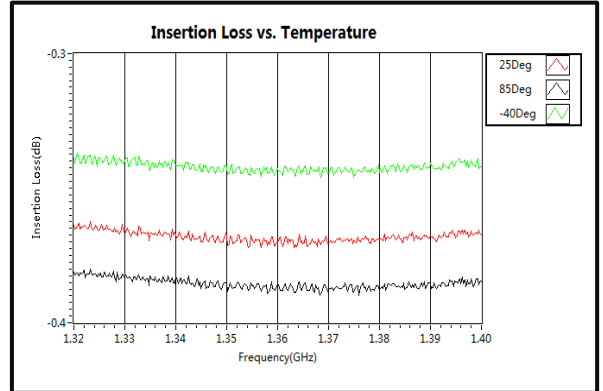




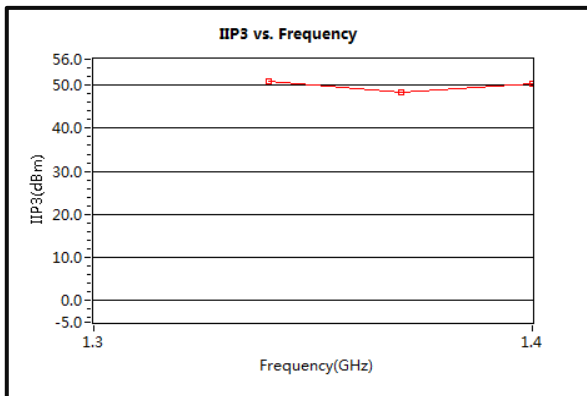
### Insertion Loss Temperature Coefficient



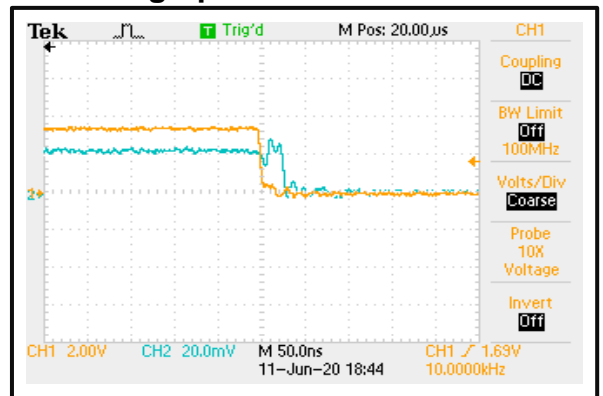
### Insertion Loss vs. Temperature



### IIP3



### Switching Speed



### Switching Speed

