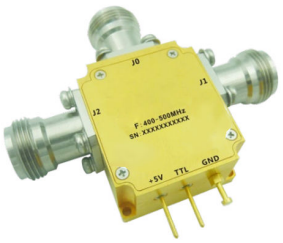
Absorptive Coaxial SP2T Switch 400 – 500MHz

Features

- Wide Band Operation 400-500MHz
- 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.	Units
Frequency Range		400 - 500		MHz
Insertion Loss		0.4	0.7	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	60	80		dB
Input VSWR		1.1	1.3	: 1
Output VSWR		1.1	1.3	: 1
RF Input Power			30	dBm
DC Power Dissipation		0.5		W
0.1dB Compression Point (P0.1dB) (Pulsed)		30		dBm
IIP3		45		dBm
Switching Speed		100 Max.		ns
Weight		3.5Typ.		Ounces
Impedance		50		Ω
Bias Current (+5V)		120 Max.		mA
Input / Output Connectors		N - Female		
Finish		Gold Plated		
Material		Aluminum		
Sealing		Hermetically Sealed (Optional)		

Absolute Maximum Ratings

Biasing	+5V±10%

Environmental Specifications

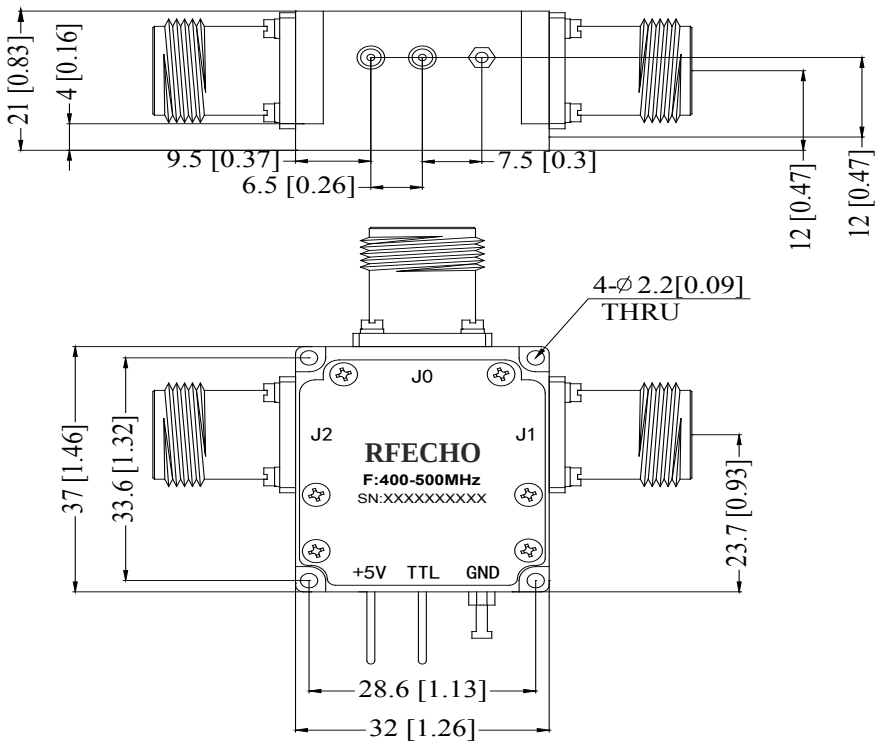
Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH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

Ordering Information

Part No.	Description
DBSA0200400050A	SP2T 400-500MHz PIN Diode Switch

Outline Drawing:

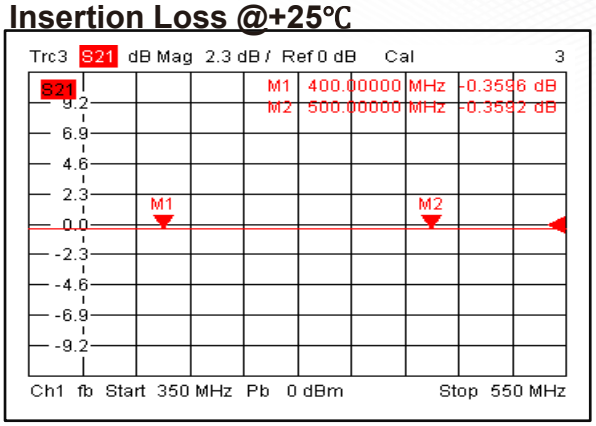
All Dimensions in mm (inches)



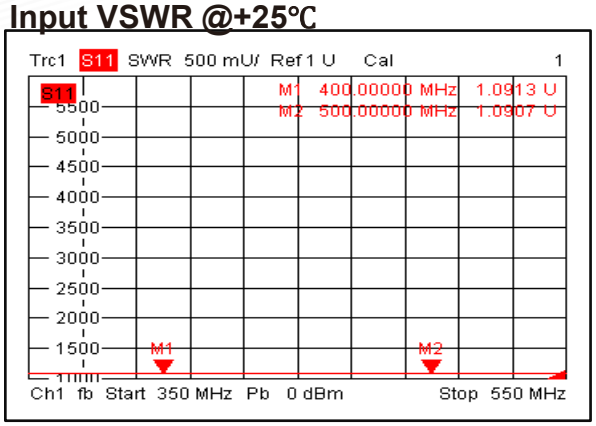
Truth Table

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	

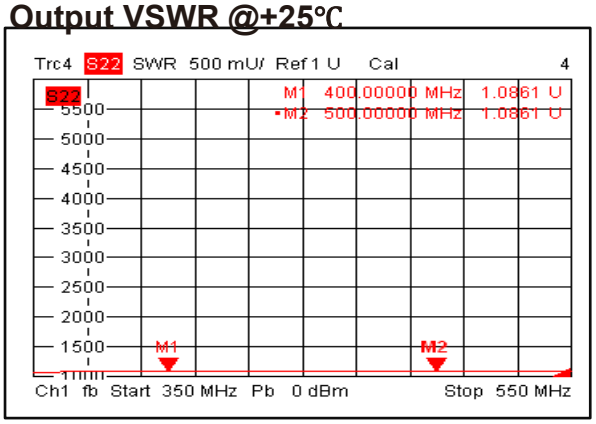
Insertion Loss @+25℃



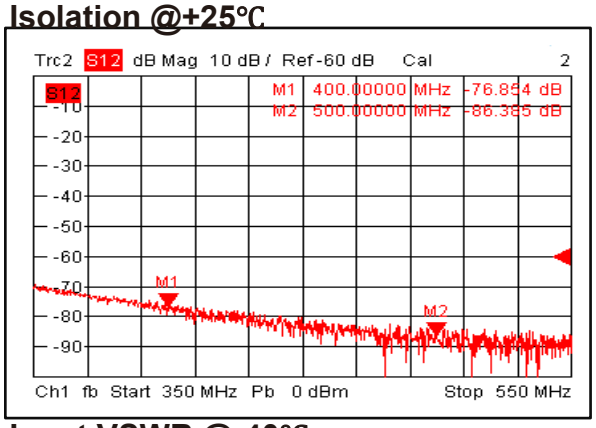
Input VSWR @+25℃



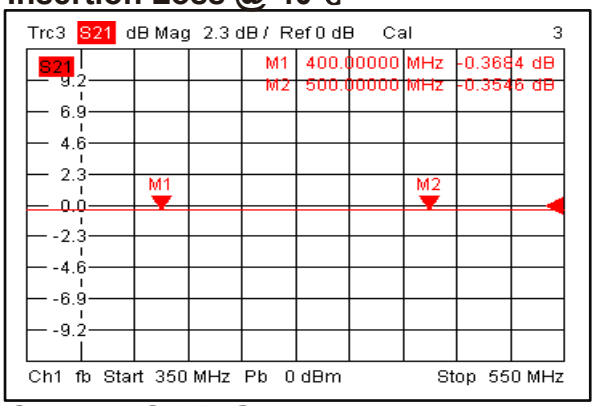
Output VSWR @+25℃



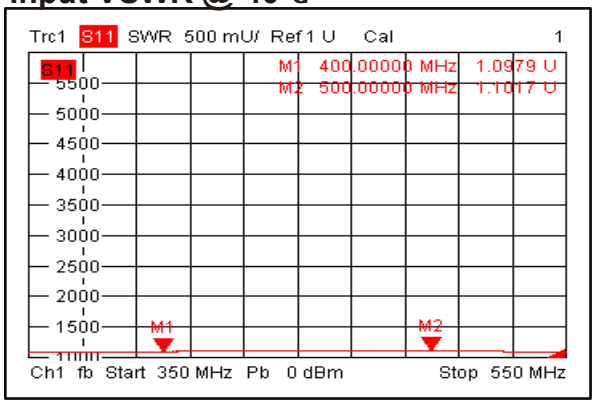
Isolation @+25℃



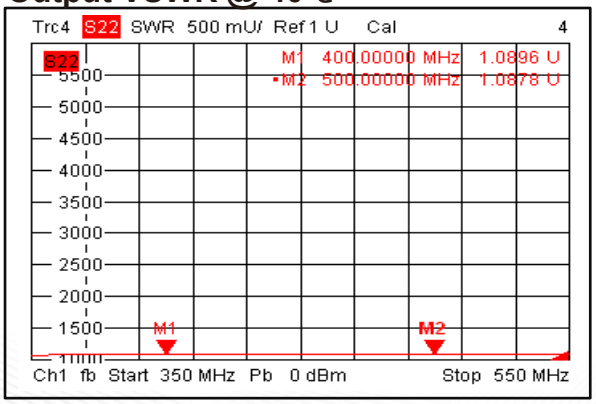
Insertion Loss @-40℃



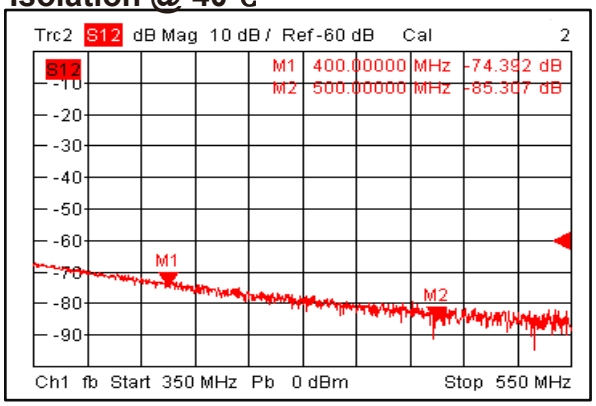
Input VSWR @-40℃



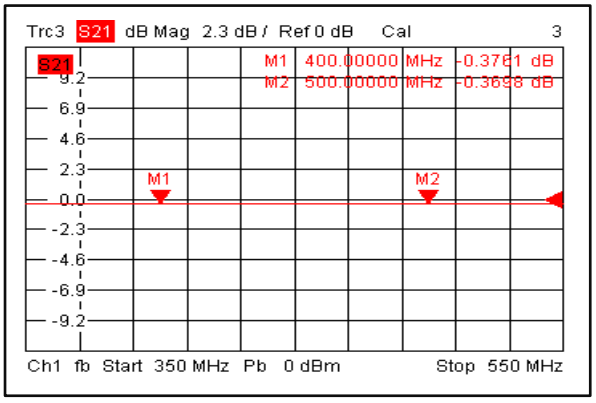
Output VSWR @-40℃



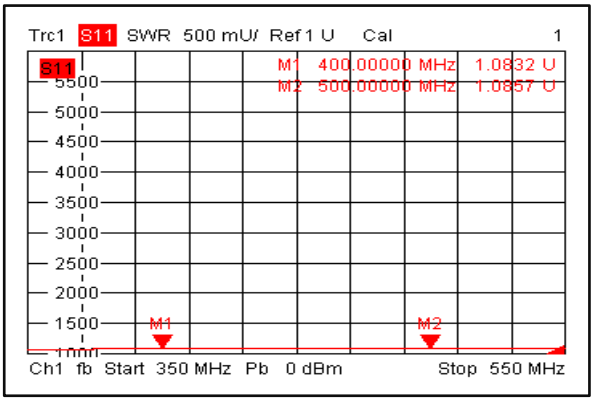
Isolation @-40℃



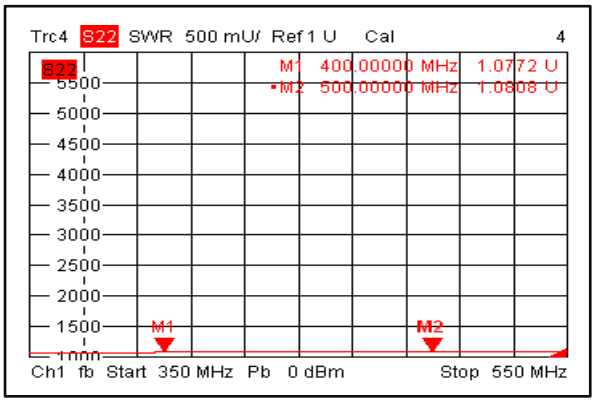
Insertion Loss @+85℃



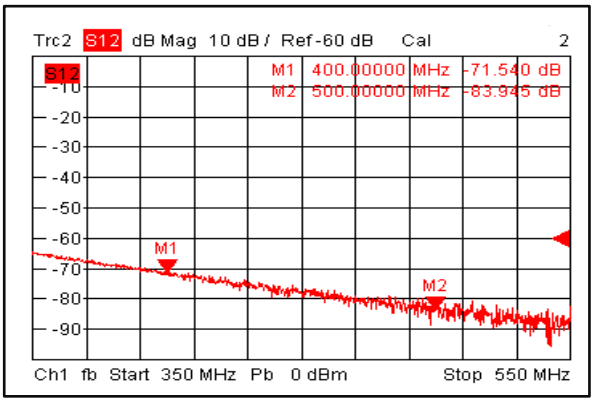
Input VSWR @+85℃



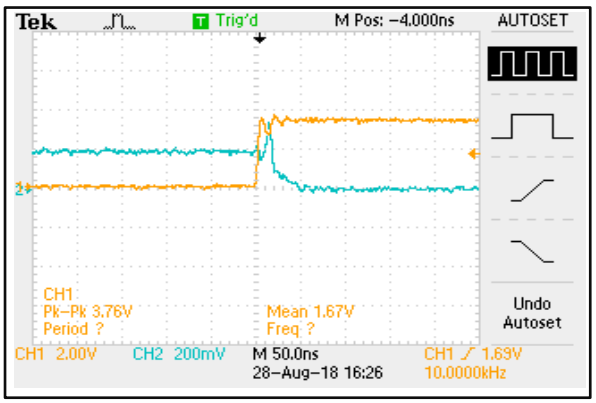
Output VSWR @+85℃



Isolation @+85℃



Switching Speed



Switching Speed