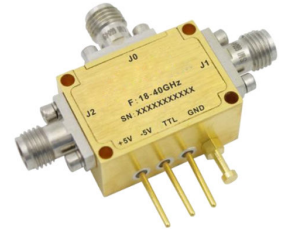




Absorptive 18-40GHz Coaxial SP2T Switch

Features

- Wide Band Operation 18-40GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation



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	18-30			30-40			GHz
Insertion Loss		3.0	4.0		3.5	4.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ °C
Isolation	50	60		45	50		dB
Input VSWR		1.8	3		2	3	: 1
Output VSWR		2.5	3		2.5	3	: 1
RF Input Power			23			23	dBm
DC Power Dissipation		0.5			0.5		W
0.1dB Compression Point (P0.1dB)		23			23		dBm
IIP3		40			38		dBm
Switching Speed	50 Max.						ns
Weight	0.6 Max.						ounces
Impedance	50						Ω
Bias Current (+5V / -5V)	100/50 Max.						mA
Input / Output Connectors	2.92mm-Female						
Finish	Gold Plated						
Material	Aluminum						
Sealing	Hermetically Sealed (Optional)						



Absolute Maximum Ratings

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

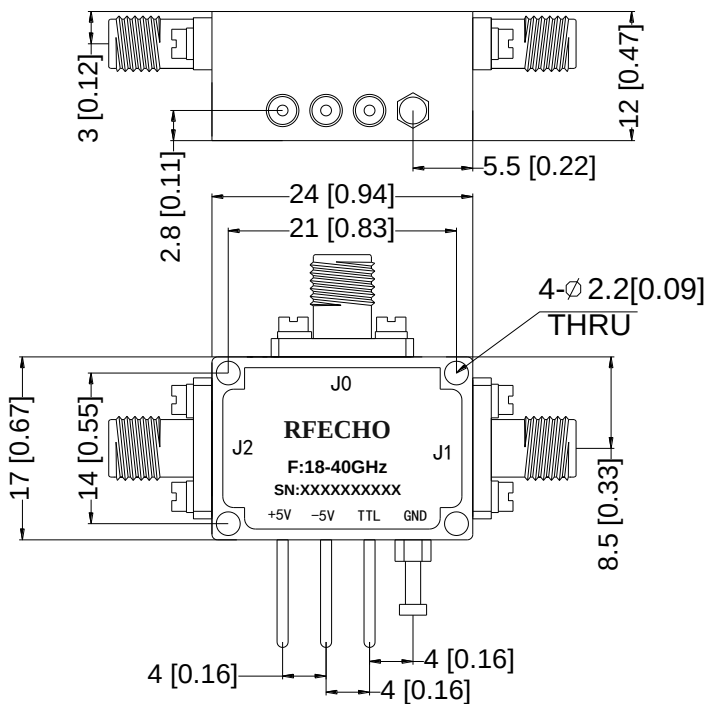
Part No.	Description
DBSA0218004000A	SP2T 18-40GHz PIN Diode Switch

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

Outline Drawing:

All Dimensions in mm (inches) Tolerances $\pm$ 0.1 (0.004)

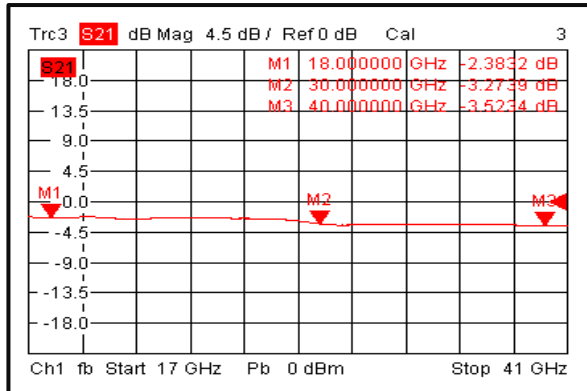


Truth Table

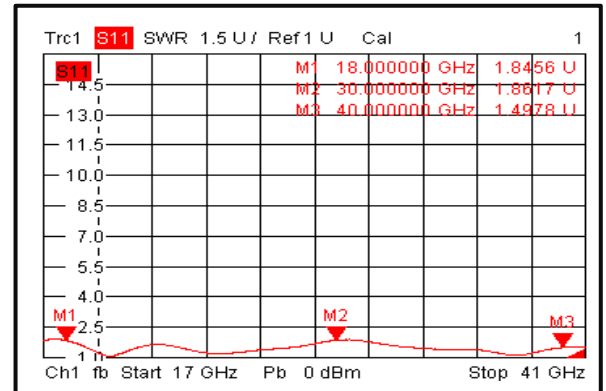
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
0	J0-J2
1	J0-J1
Control Pin Customization available upon request	



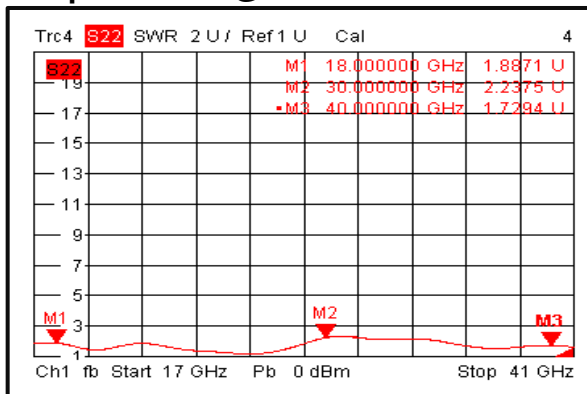
Insertion Loss @+25°C



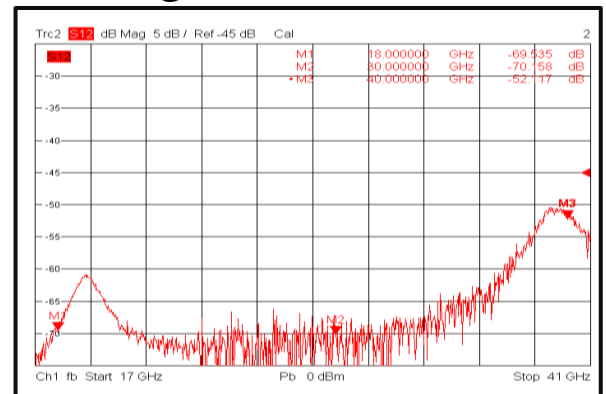
Input VSWR @+25°C



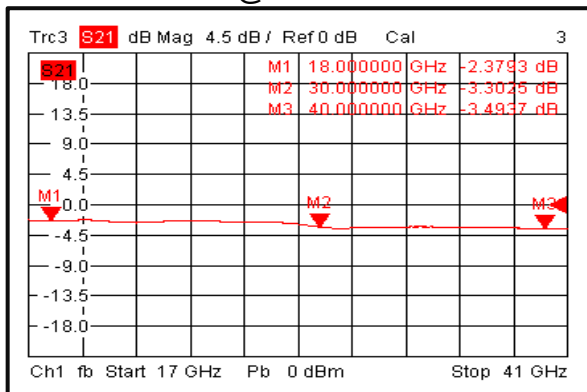
Output VSWR @+25°C



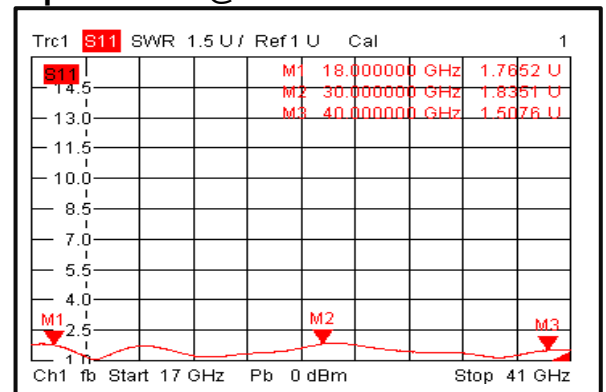
Isolation @+25°C



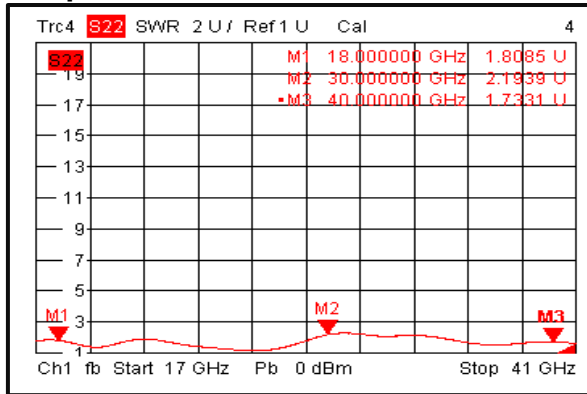
Insertion Loss @-40°C



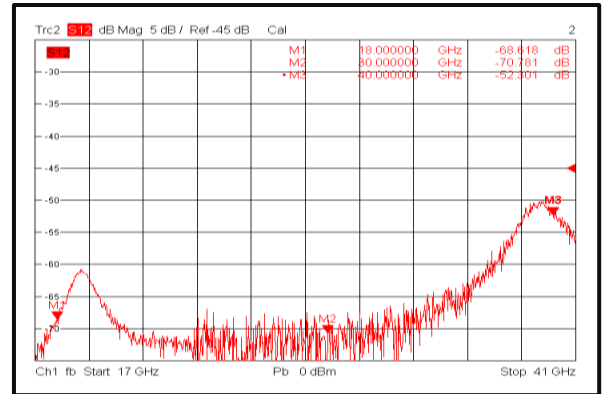
Input VSWR @-40°C



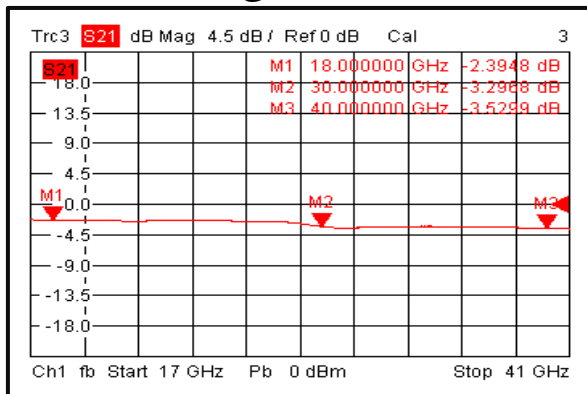
Output VSWR @-40°C



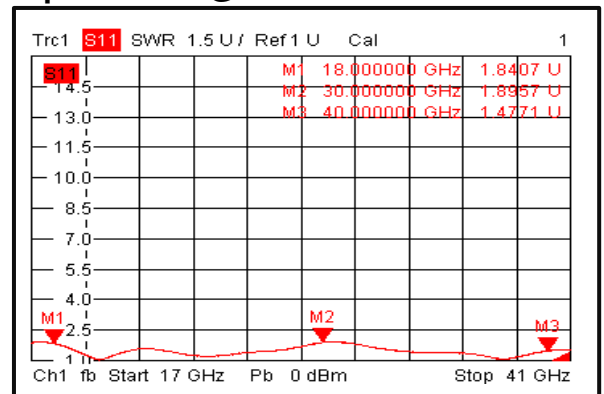
Isolation @-40°C



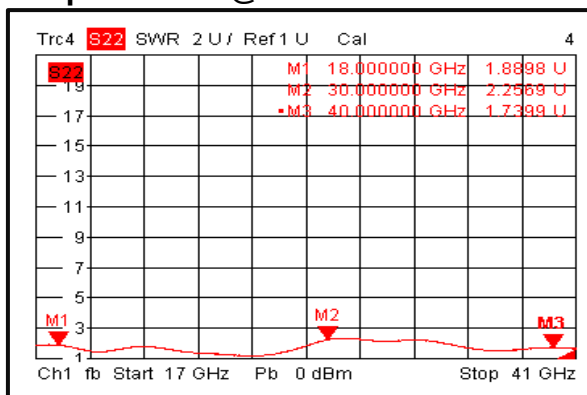
Insertion Loss @+85°C



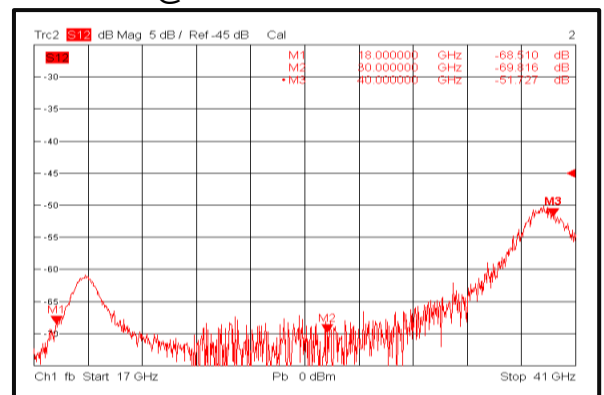
Input VSWR @+85°C



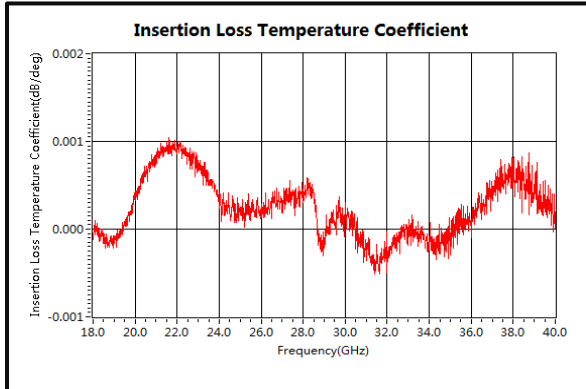
Output VSWR @+85°C



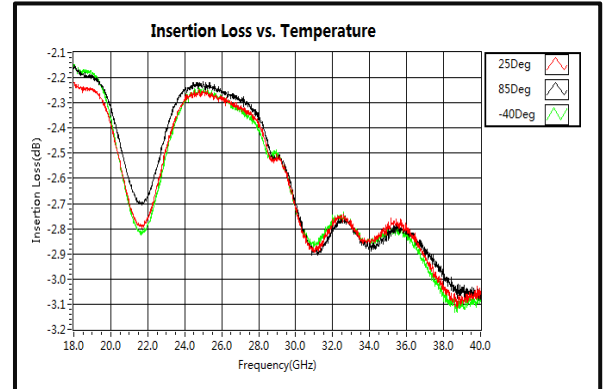
Isolation @+85°C



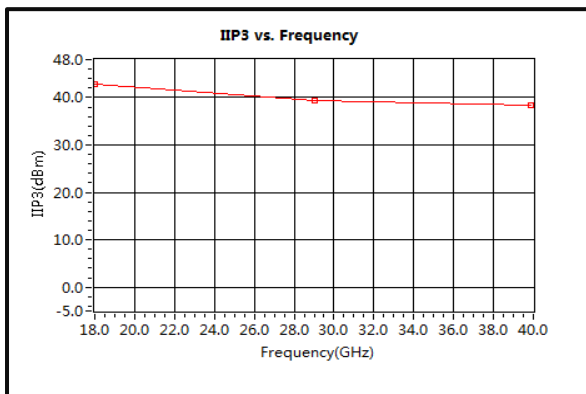
Insertion Loss Temperature Coefficient



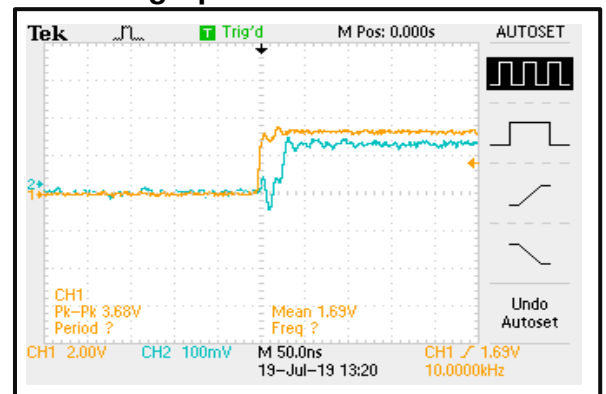
Insertion Loss vs. Temperature



IIP3



Switching Speed



Switching Speed

