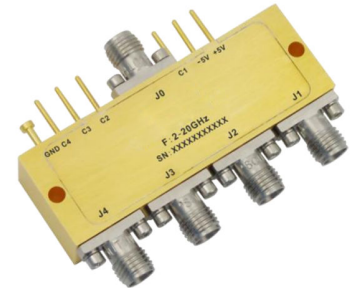




Absorptive 2-20GHz Coaxial SP4T Switch

Features

- Ultra Wide Band Operation 2-20GHz
- 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.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	2~6			6~12			12~20			GHz
Insertion Loss		1.8	2		2.7	3		3.2	3.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ °C
Isolation	70	75		70	75		60	65		dB
Input VSWR		1.8	2		1.6	2		1.6	2	: 1
Output VSWR		1.8	2		1.6	2		1.6	2	: 1
RF Input power	30			30			30			dBm
DC Power Dissipation (CW)		0.3			0.4			0.5		W
0.1dB Compression P0.1dB		30			30			30		dBm
IIP3		55			55			55		dBm
Switching Speed	100									ns
Weight	1.06									ounces
Impedance	50									Ω
Biasing(+5V/-5V)	160/50									mA
Input /Output Connectors	SMA-Female									
Finish	Gold Plated									
Material	Aluminum									
Seal	Hermetically Sealed (optional)									



Absolute Maximum Ratings

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

Part No.	Description
DBSA0402002000A	SP4T 2-20GHz 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 Uncontrolled 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:

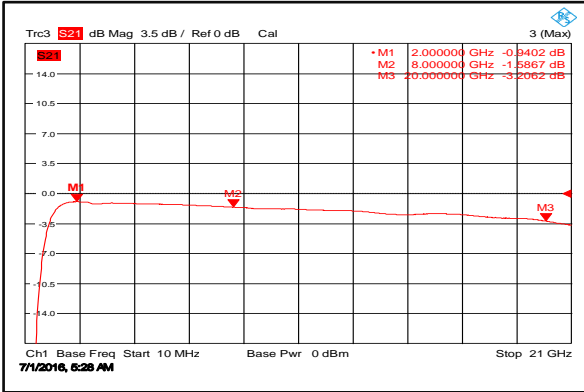
All Dimensions in mm (inches)

TTL Control Voltage THRESHOLD				Low(0)=0~0.8V	High(1)=2.8~5V
Control Input TTL				Signal Path State	
C4	C3	C2	C1		
0	0	0	0	NC	
1	1	1	0	J0-J1	
1	1	0	1	J0-J2	
1	0	1	1	J0-J3	
0	1	1	1	J0-J4	
1	1	1	1	OFF	

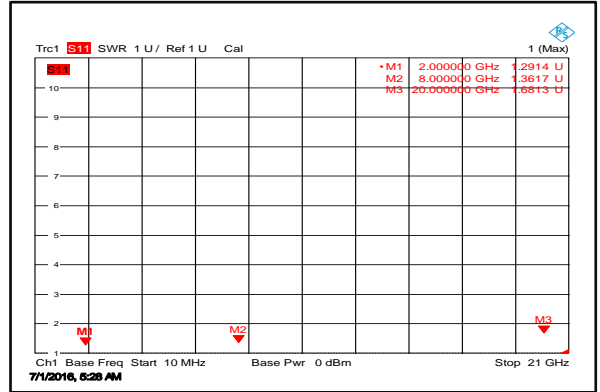
Control Pin Customization available upon request



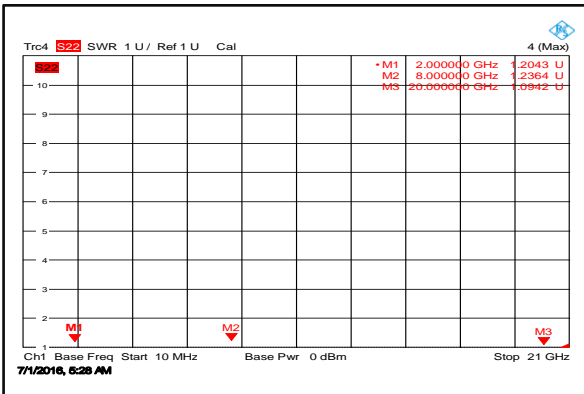
Insertion Loss



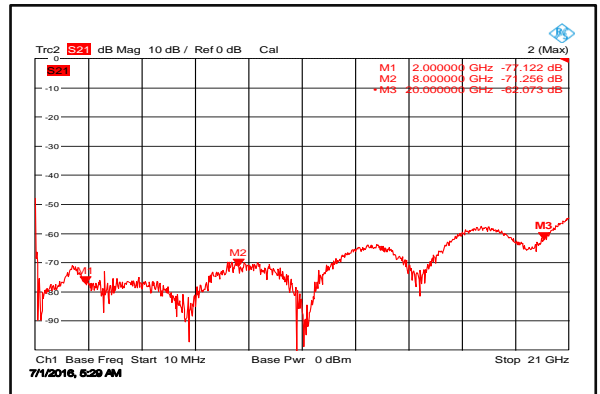
Input VSWR



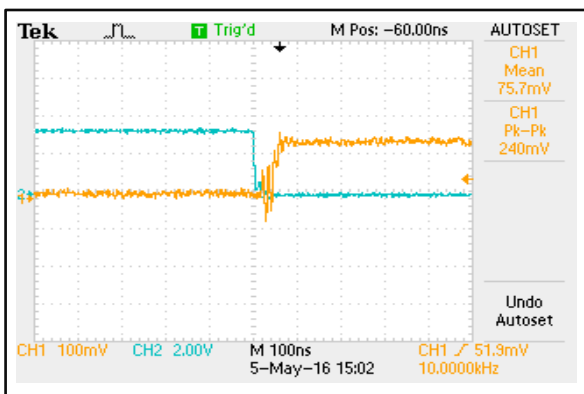
Output VSWR



Isolation



Turn on Switching Speed



Turn off Switching Speed

