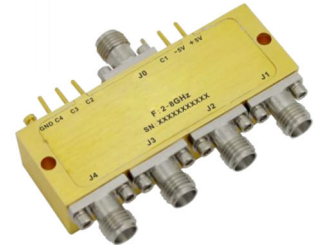




Reflective 2-8GHz Coaxial SP4T Switch

Features

- Wide Band Operation 2-8GHz
- 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

Parameters	Min	Typ.	Max	Units
Frequency Range	2-8			GHz
Insertion Loss		1.5	2.0	dB
Insertion Loss Temperature Coefficient		0.003		dB/ °C
Isolation	80	85		dB
Input VSWR		1.3	1.5	: 1
Output VSWR		1.3	1.5	: 1
RF Input power (CW)			30	dBm
DC Power Dissipation (CW)		0.8		W
0.1dB Compression Point (P0.1dB)		30		dBm
IIP3		55		dBm
Switching Speed			100	ns
Weight	1.06			ounces
Impedance	50			Ω
Bias Current (+5V / -5V)	150/50			mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (optional)			



Absolute Maximum Ratings

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

Part No.	Description
DBSR0402000800A	SP4T2-8GHz 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)

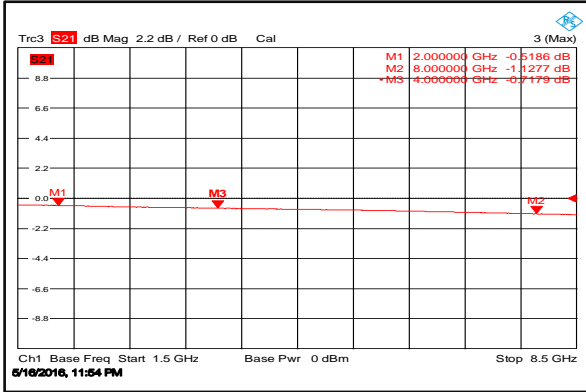
Truth Table

TTL Control Voltage THRESHOLD				Low(0)=0~0.8V
Control Input TTL				High(1)=2.8~5V
C4	C3	C2	C1	Signal Path State
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

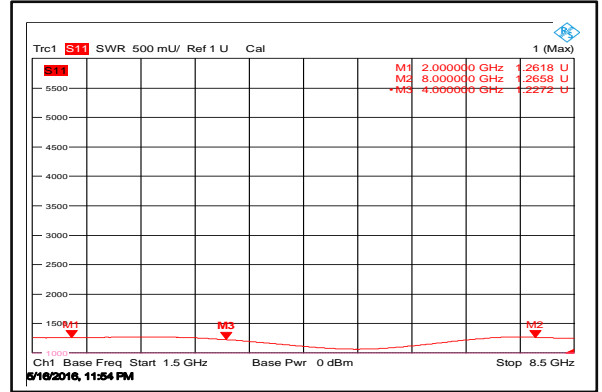
Control Pin Customization available upon request



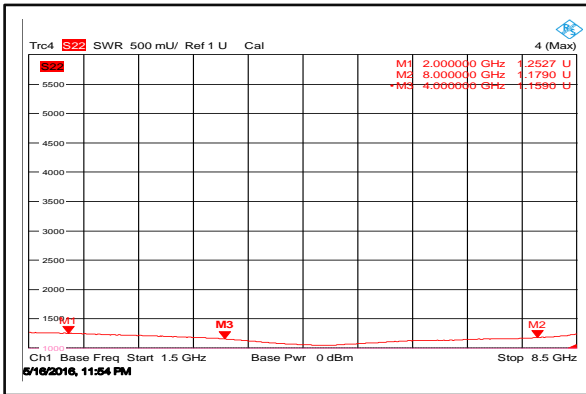
Insertion Loss



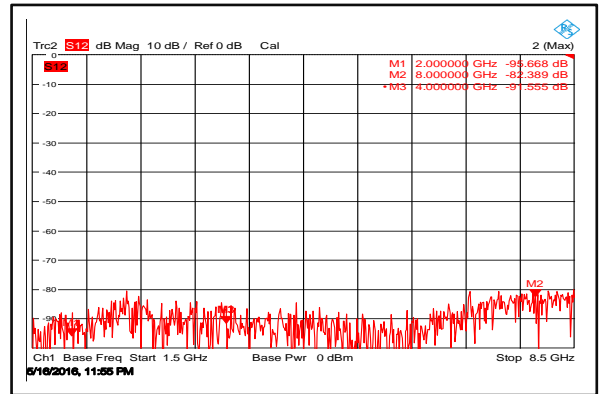
Input VSWR



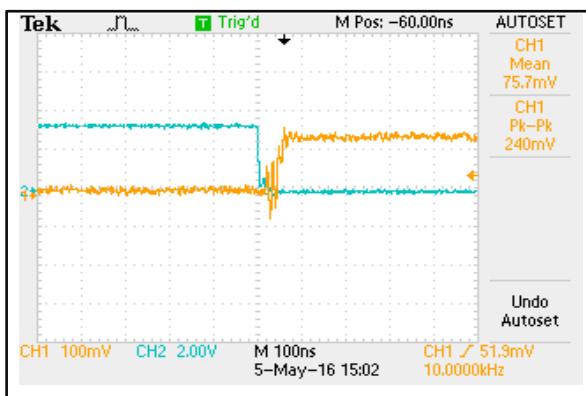
Output VSWR



Isolation



Turn on Switching Speed



Turn off Switching Speed

