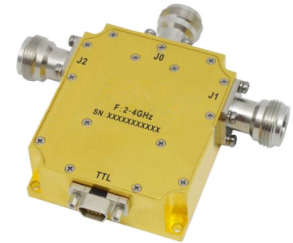




# Reflective 2-4GHz Coaxial SP2T Switch

## Features

- Wide Band Operation 2-4GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- High Power Cold Switching
- 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	2-4			GHz
Insertion Loss		1.3	1.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	50	65		dB
Input VSWR		1.3	1.5	: 1
Output VSWR		1.3	1.5	: 1
RF Input power (CW)			50	W
DC Power Dissipation (CW)		10		W
0.1dB Compression Point P0.1dB		47		dBm
IIP3		55		dBm
Switching Speed			1	us
Weight	5.99			ounces
Impedance	50			$\Omega$
Bias Current (+5V)	120			mA
Input / Output Connectors	N-Female			
Interface and Control Connector	MICRO-D9 (Female)			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



### Absolute Maximum Ratings

Biassing	+5V±10%
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### Ordering Information

Part No.	Description
DBSR0202000400C	SP2T 2-4GHz 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:

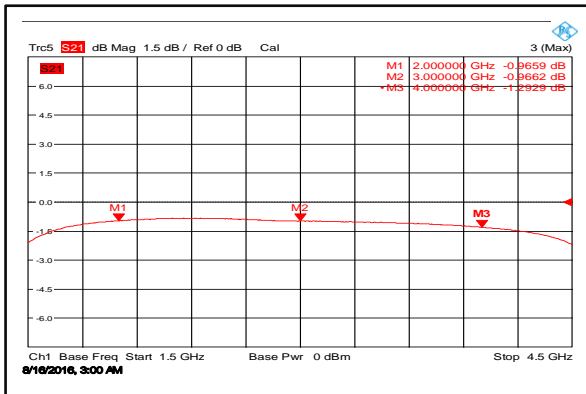
All Dimensions in mm (inches)  
Housing Tolerances ±0.2 [0.008]

The drawing shows three views of the component: a top view, a side view, and a bottom view. The top view includes dimensions for the housing (60 [2.36] x 53 [2.09]), mounting holes (4-Ø3.3 [0.13] THRU), and a 2-56THREAD DP3.5 [0.138] screw. The side view shows a height of 37 [1.46] mm and a heat sink. The bottom view shows a MICRO-D9(Female) connector with pins labeled TTL, GND, NC, GND, +5V, GND, NC, GND, NC. The component is labeled 'RFECHO F:2-4GHz SN:XXXXXXXXXX'.

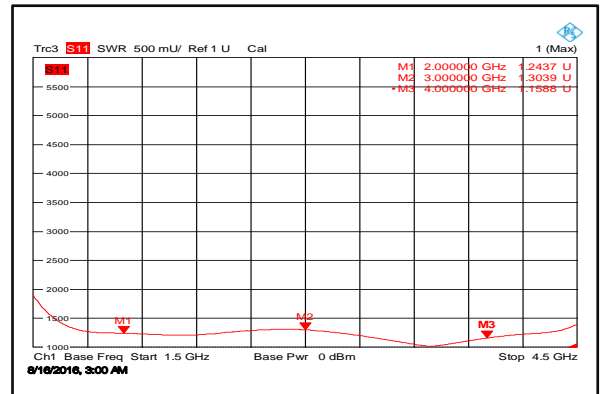
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	Signal Path State
0	J0-J1
1	J0-J2
Control Pin Customization available upon request	



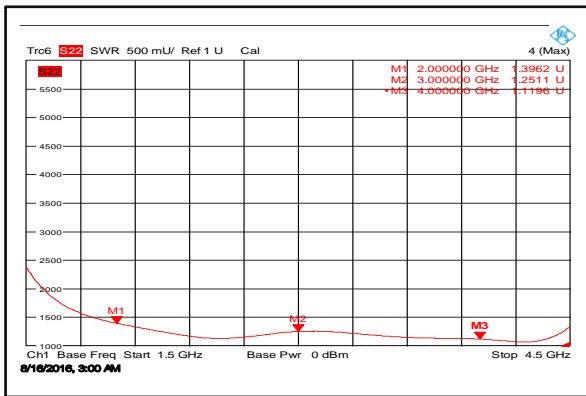
### Insertion Loss



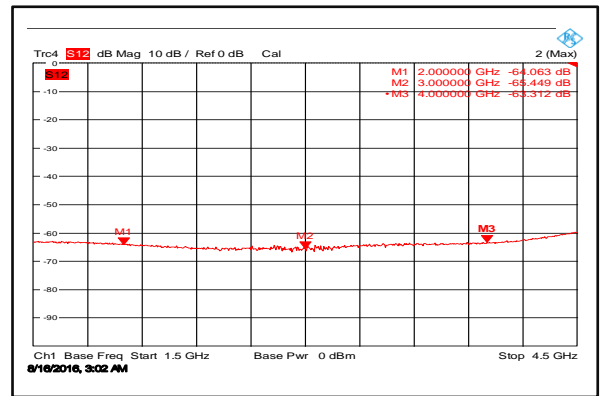
### Input VSWR



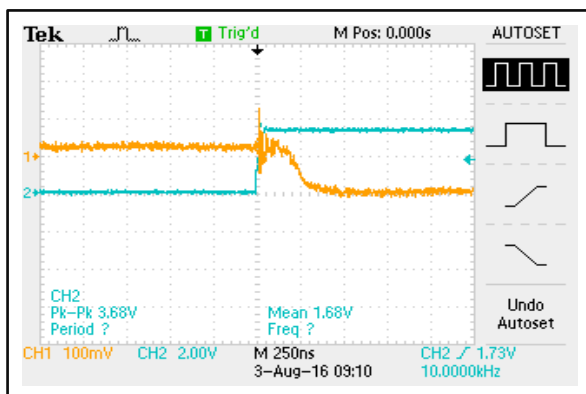
### Output VSWR



### Isolation



### Switching Speed



### Switching Speed

