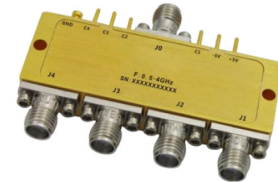




Reflective Coaxial SP4T Switch 0.5 - 4GHz

Features

- Wide Band Operation 0.5-4GHz
- 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		0.5-4		GHz
Insertion Loss		1	1.5	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	75	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		1.5		W
0.1dB Compression P0.1dB (P0.1dB)		30		dBm
IIP3		55		dBm
Switching Speed			100	ns
Weight		1.06		ounces
Impedance		50		Ω
Bias Current (+5V / -5V)		160/50		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

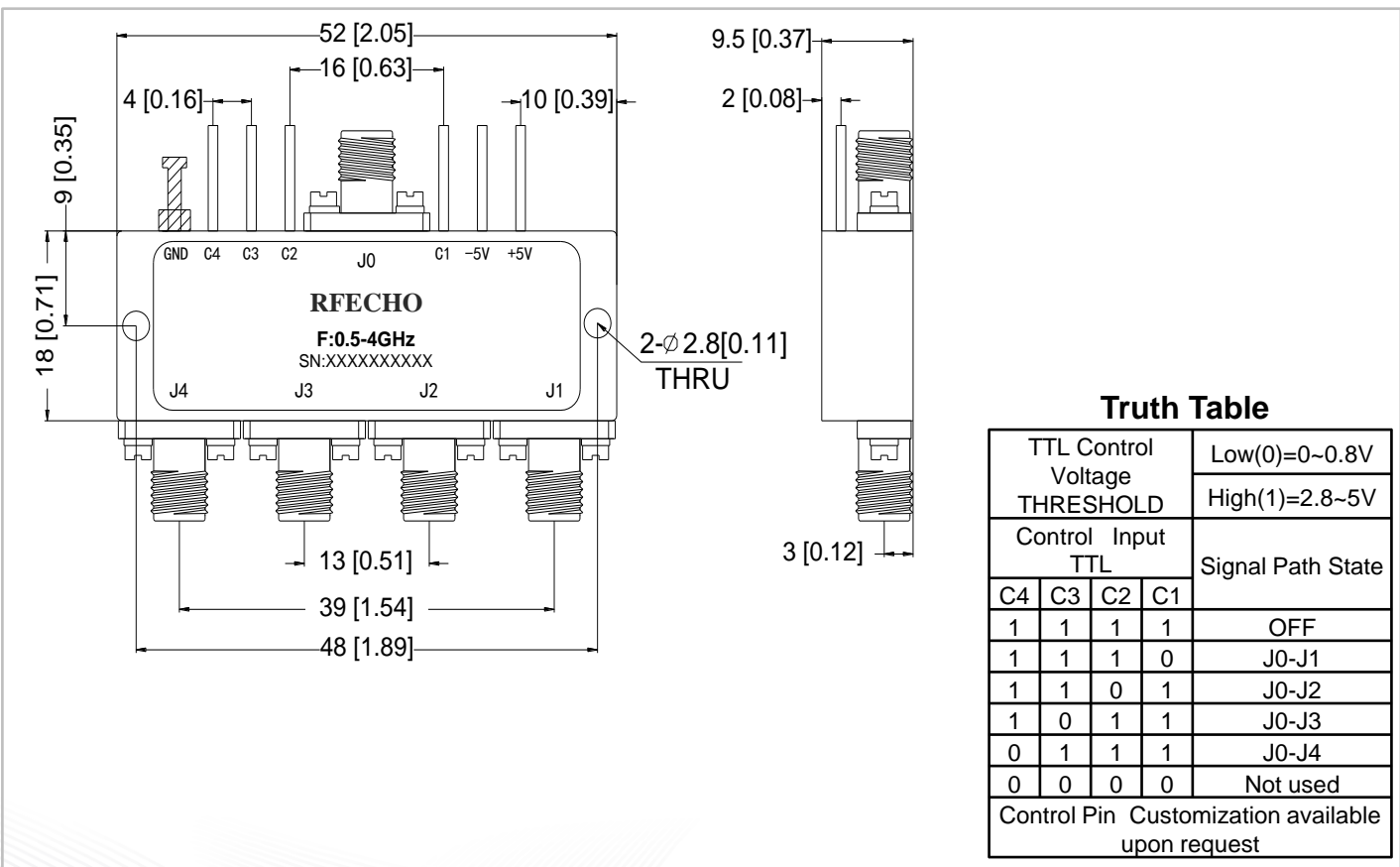
Part No.	Description
DBSR0400500400A	SP4T 0.5-4GHz PIN Diode Switch

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)

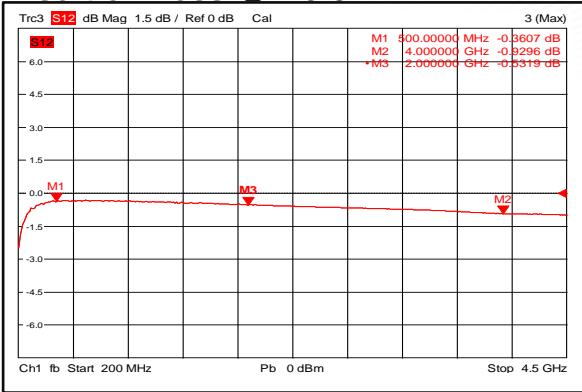


Truth Table

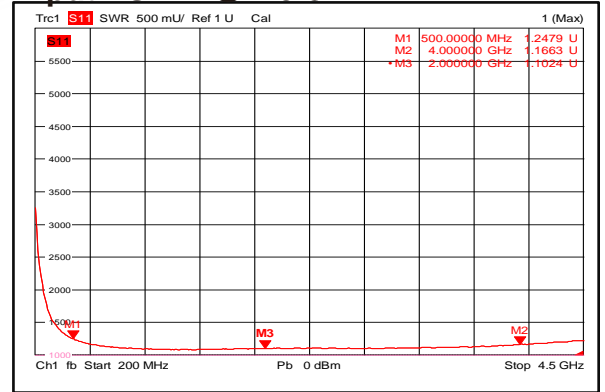
TTL Control Voltage THRESHOLD		Low(0)=0~0.8V		High(1)=2.8~5V	
Control Input TTL				Signal Path State	
C4	C3	C2	C1		
1	1	1	1	OFF	
1	1	1	0	J0-J1	
1	1	0	1	J0-J2	
1	0	1	1	J0-J3	
0	1	1	1	J0-J4	
0	0	0	0	Not used	
Control Pin Customization available upon request					



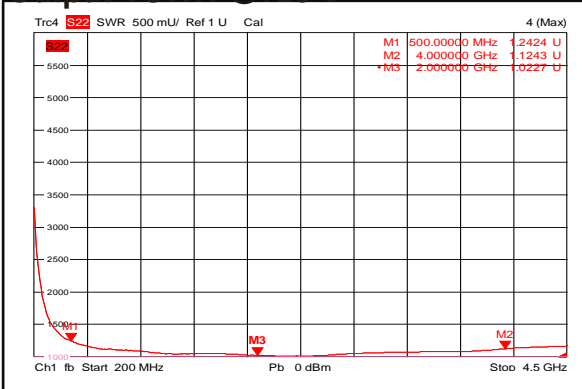
Insertion Loss @+25°C



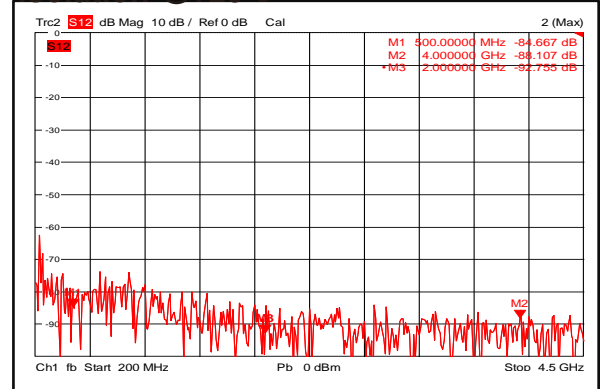
Input VSWR @+25°C



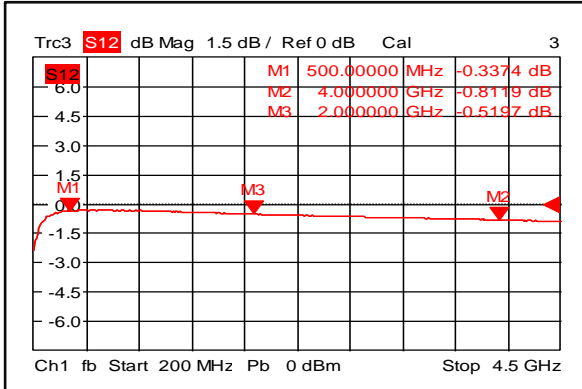
Output VSWR @+25°C



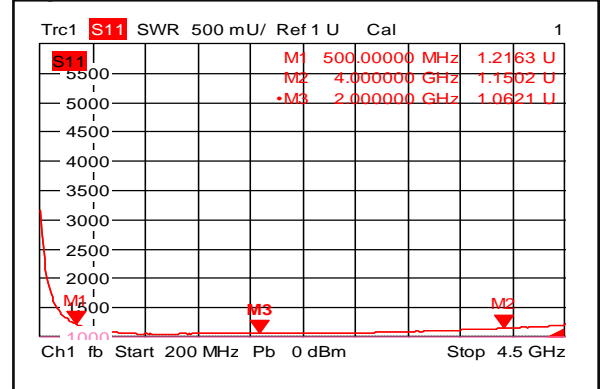
Isolation @+25°C



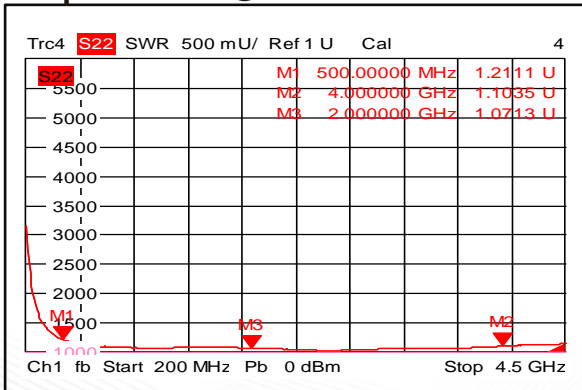
Insertion Loss @-40°C



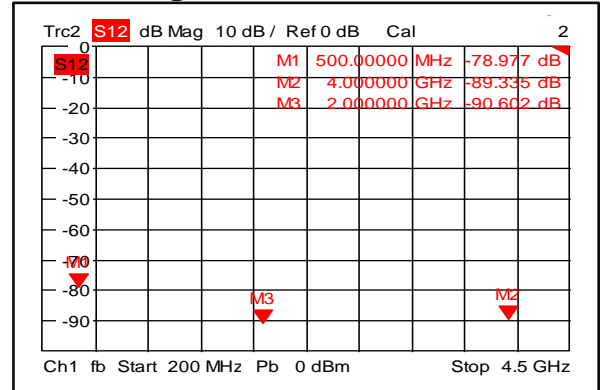
Input VSWR @-40°C



Output VSWR @-40°C

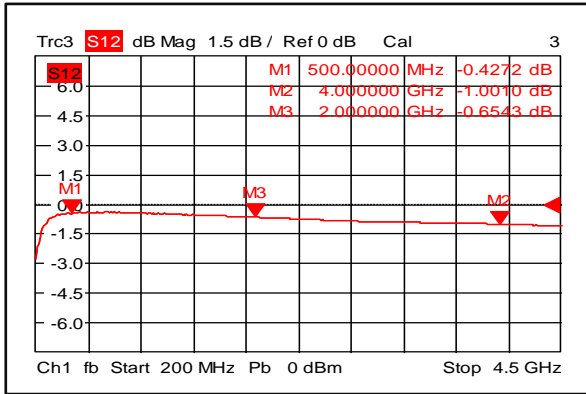


Isolation @-40°C

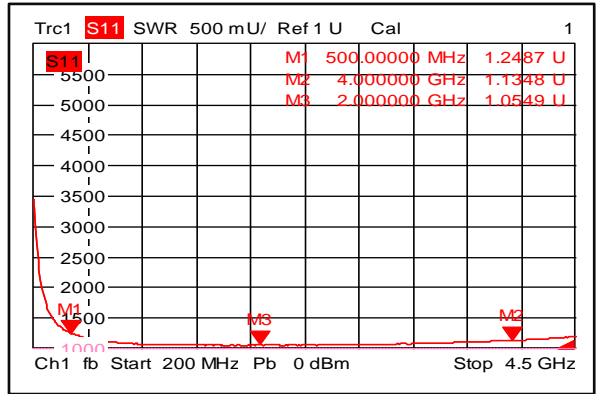




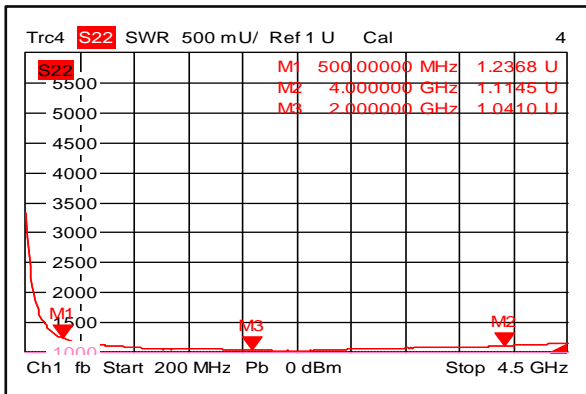
Insertion Loss @+85°C



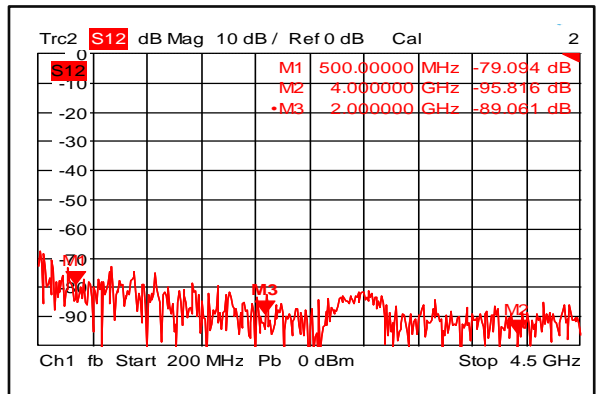
Input VSWR @+85°C



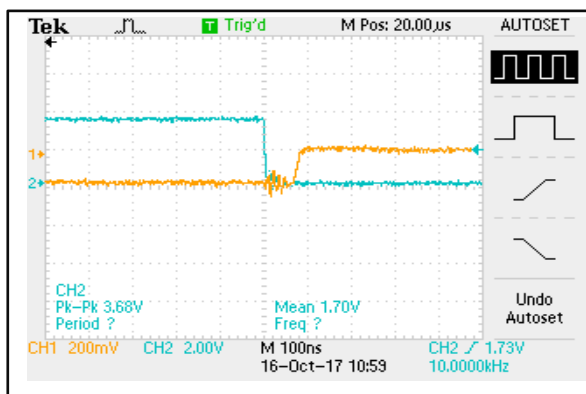
Output VSWR @+85°C



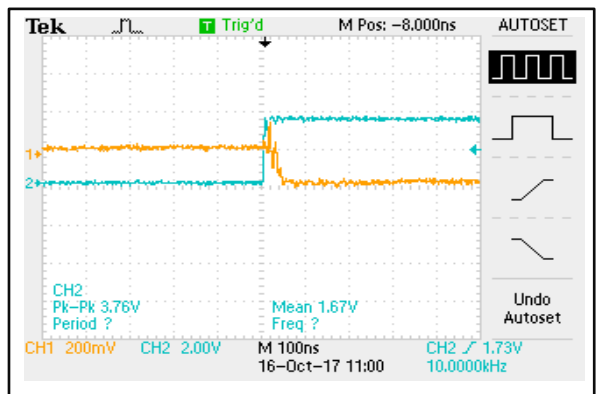
Isolation @+85°C



Switching Speed



Switching Speed





RFecho
A Gateway to RFWorld