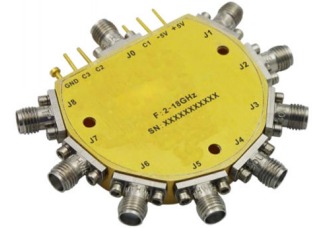




Reflective 2-18GHz Coaxial SP8T Switch

Features

- Wide Band Operation 2-18GHz
- 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	Min	Typ.	Max	Min	Typ.	Max	Units
Frequency Range	2-8			8-12			12-18			GHz
Insertion Loss		2	2.5		2.5	3		3	3.5	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ ° C
Isolation	80	85		70	75		70	75		dB
Input VSWR		1.6	2		1.6	2		1.6	2	: 1
Output VSWR		1.6	2		1.6	2		1.6	2	: 1
RF Input Power			30			30			30	dBm
Power Dissipation		1.5			1.5			1.5		W
0.1dB Compression P0.1dB			30			30			30	dBm
IIP3		55			55			55		dBm
Switching Speed	100									ns
Weight	1.76									ounces
Impedance	50									Ω
Bias Current (+5V/-5V)	280/50									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

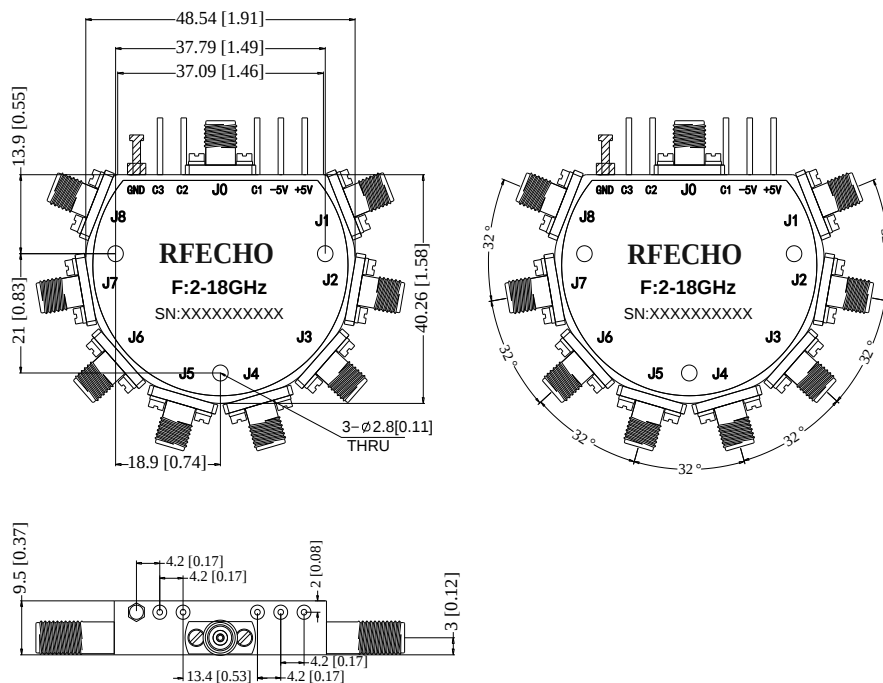
Part No.	Description
DBSR0802001800A	SP8T 2-18GHz PIN Diode Switch

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)

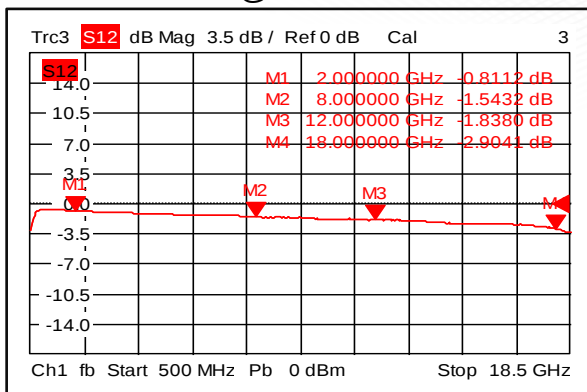


Truth Table

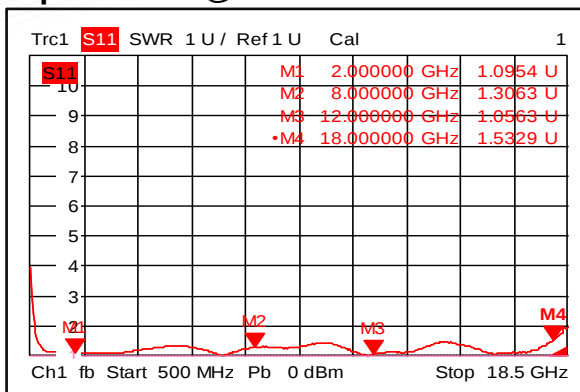
TTL Control Voltage THRESHOLD			Low(0)=0~0.8V
Control Input TTL			High(1)=2.8~5V
C3	C2	C1	Signal Path State
0	0	0	J0-J1
0	0	1	J0-J2
0	1	0	J0-J3
0	1	1	J0-J4
1	0	0	J0-J5
1	0	1	J0-J6
1	1	0	J0-J7
1	1	1	J0-J8
Control Pin Customization available upon request			



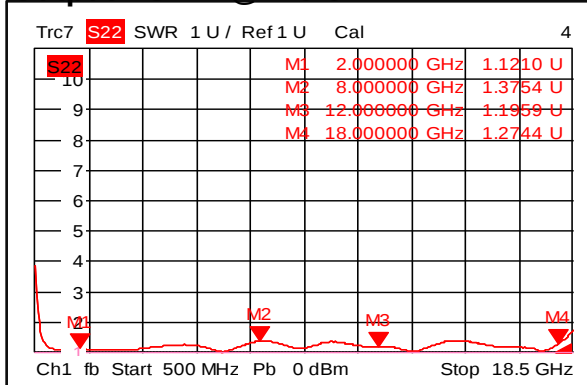
Insertion Loss @+25°C



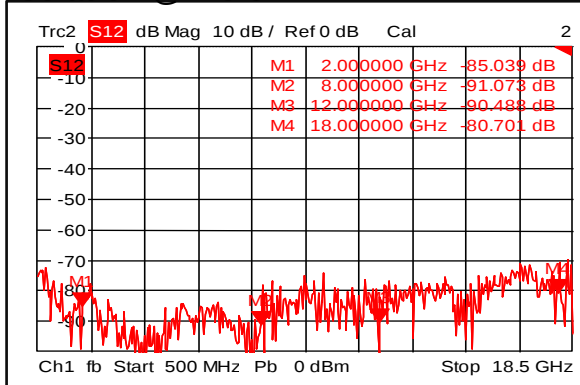
Input VSWR @+25°C



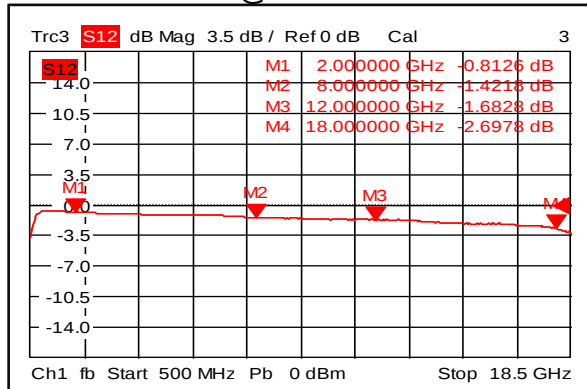
Output VSWR @+25°C



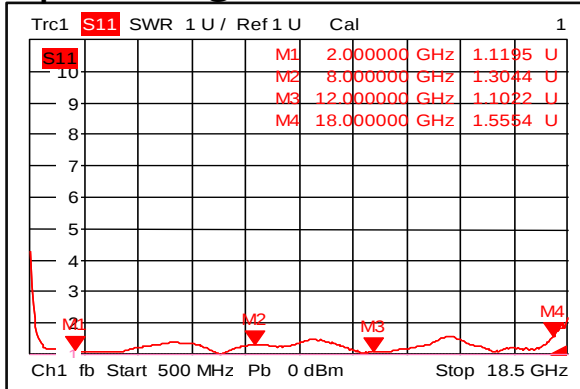
Isolation @+25°C



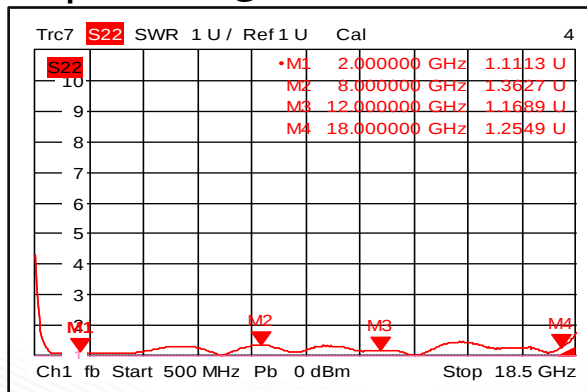
Insertion Loss @-40°C



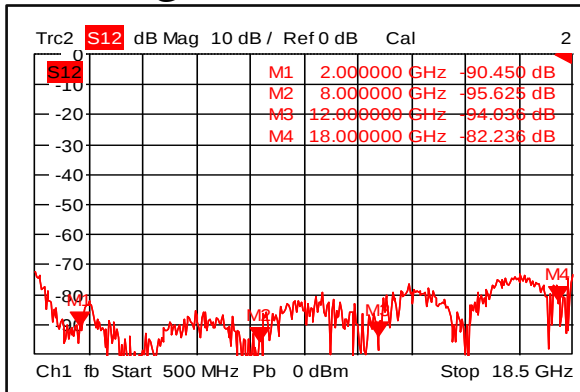
Input VSWR @-40°C



Output VSWR @-40°C

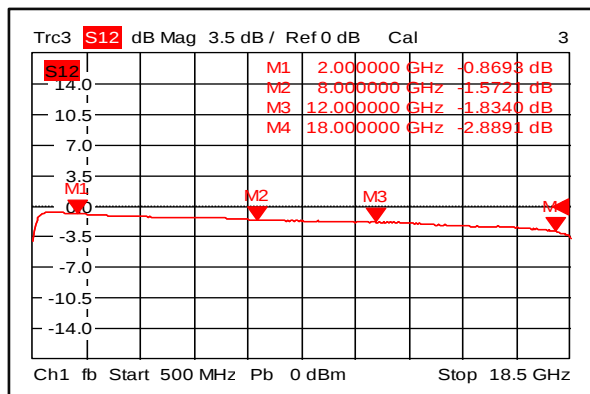


Isolation @-40°C

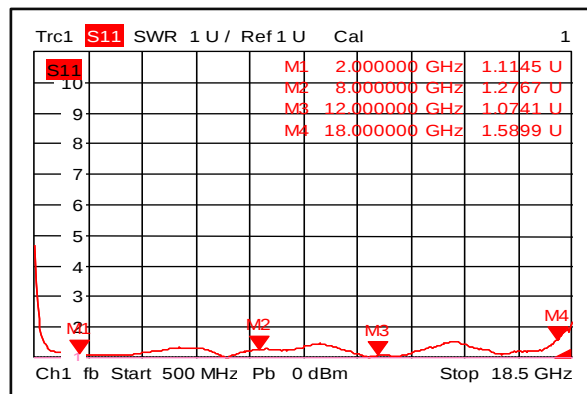




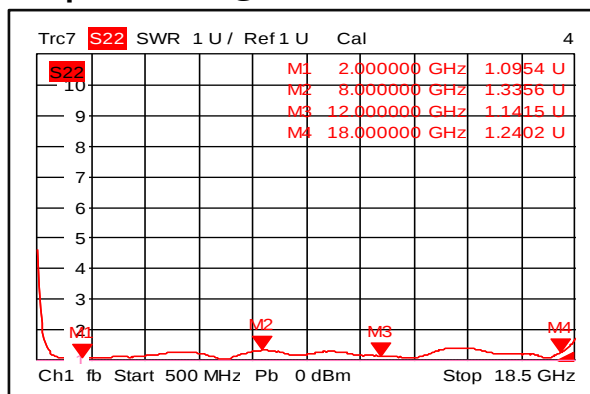
Insertion Loss @+85°C



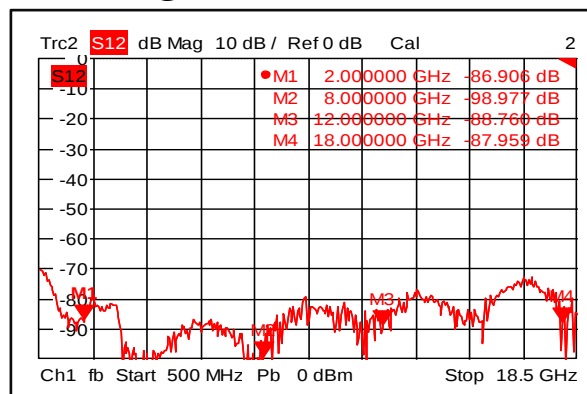
Input VSWR @+85°C



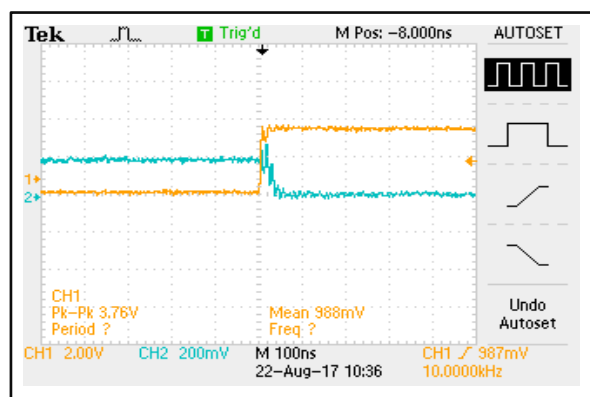
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

