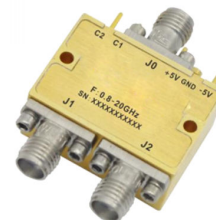




Reflective 0.8-20GHz Coaxial SP2T Switch

Features

- Ultra Wide Band Operation 0.8-20GHz
- 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	0.8-8			8-12			12-20			GHz
Insertion Loss		1.5	1.7		1.8	2.2		2.2	2.6	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ ° C
Isolation	80	85		80	85		70	82		dB
Input VSWR		1.5	1.8		1.5	1.8		1.5	1.8	: 1
Output VSWR		1.5	1.8		1.5	1.8		1.5	1.8	: 1
RF Input Power (CW)			30			30			30	dBm
DC Power Dissipation		0.5			0.5			0.5		W
0.1dB Compression Point (P0.1dB)		30			30			30		dBm
IIP3		55			55			55		dBm
Switching Speed	100									ns
Weight	0.71									ounces
Impedance	50									Ω
Bias Current (+5V/-5V)	80/50									mA
Input / Output Connectors	SMA - Female									
Finishing	Gold Plating									
Material	Aluminum									
Sealing	Hermetically Sealed (optional)									



Absolute Maximum Ratings

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

Ordering Information

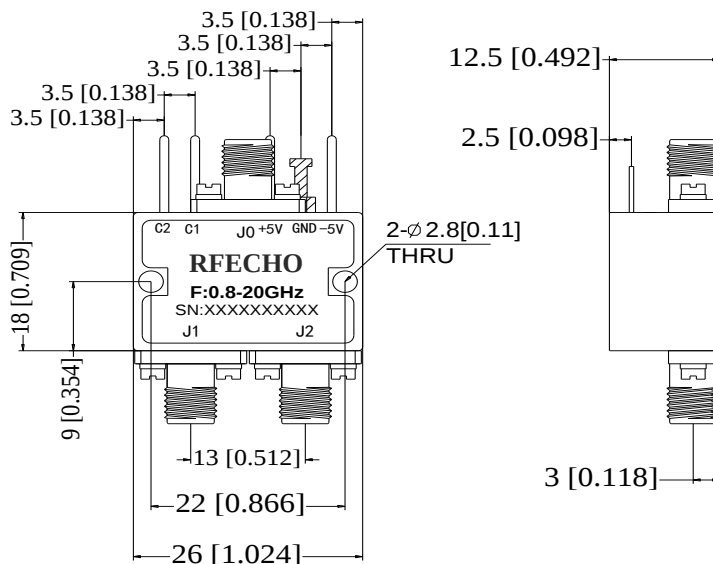
Part No.	Description
DBSR0200802000A	SP2T 0.8-20GHz PIN Diode Switch

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)

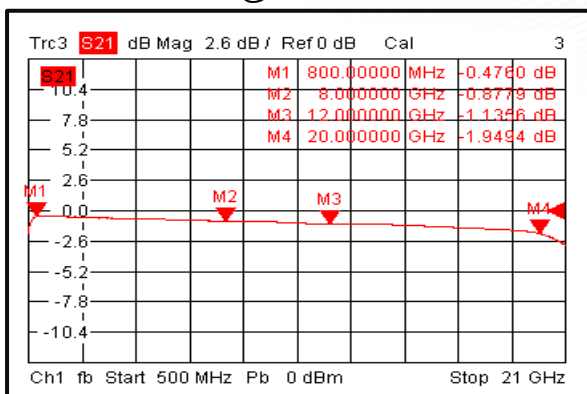


Truth Table

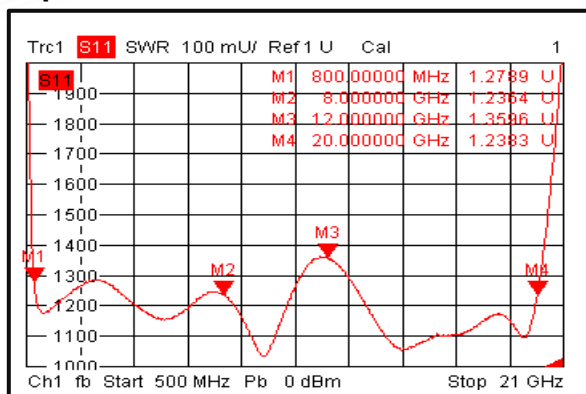
TTL Control Voltage THRESHOLD		Low(0)=0~0.8V
Control Input TTL		High(1)=2.8~5V
C1	C2	State
0	1	J0-J1
1	0	J0-J2
0	0	OFF
1	1	OFF
Control Pin Customization available upon request		



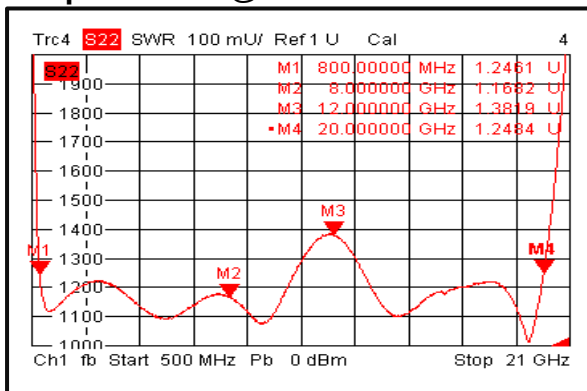
Insertion Loss @+25°C



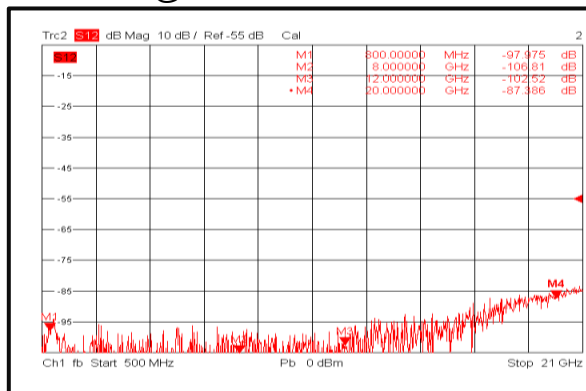
Input VSWR @+25°C



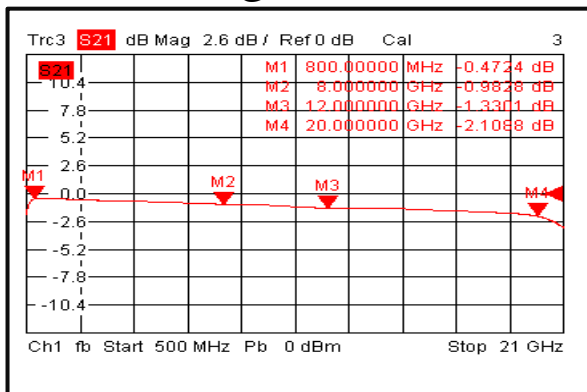
Output VSWR @+25°C



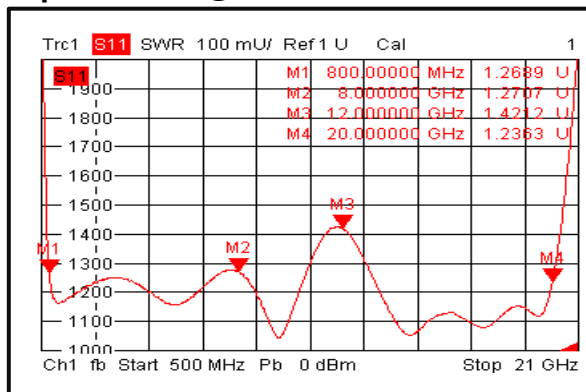
Isolation @+25°C



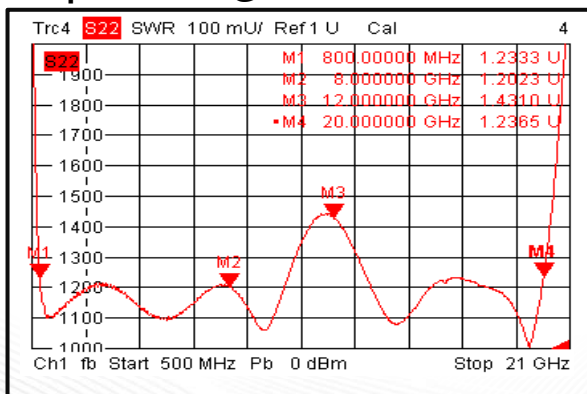
Insertion Loss @-40°C



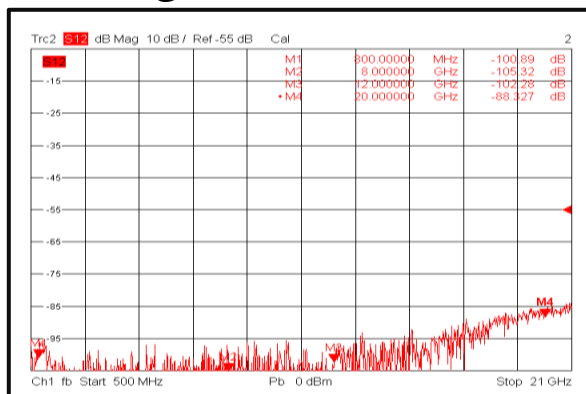
Input VSWR @-40°C



Output VSWR @-40°C

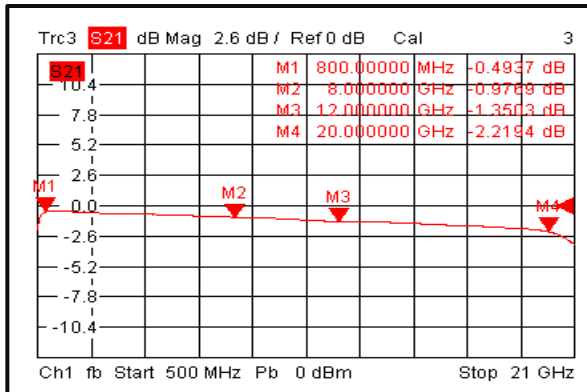


Isolation @-40°C

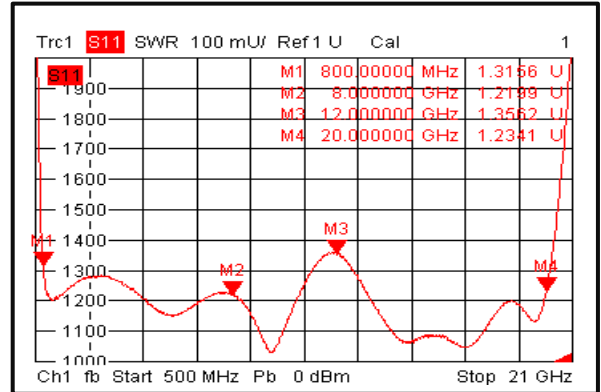




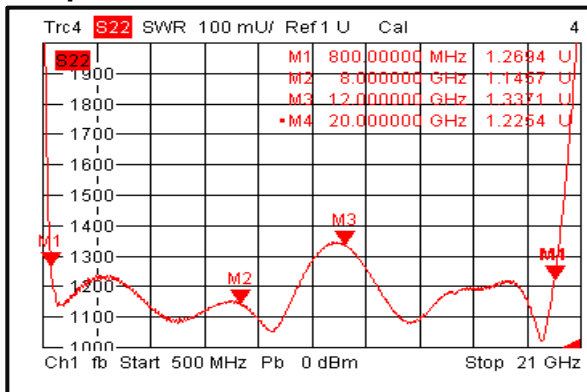
Insertion Loss @+85°C



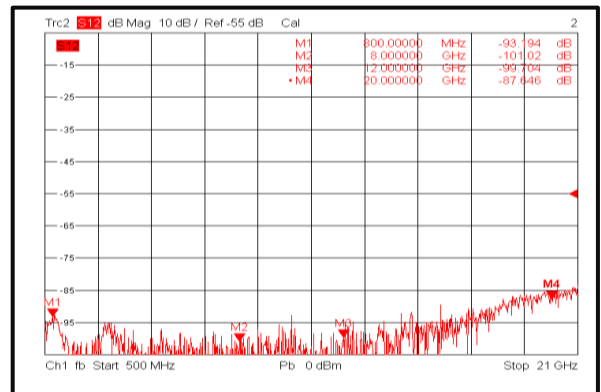
Input VSWR @+85°C



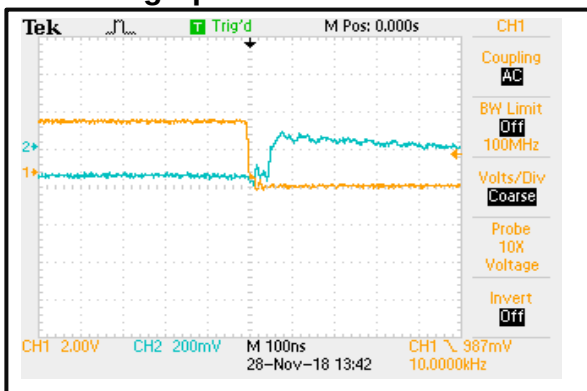
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

