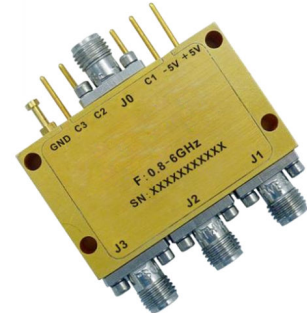




Absorptive Coaxial SP3T Switch 0.8 - 6GHz

Features

- Wide Band Operation 0.8-6GHz
- 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	0.8~6			GHz
Insertion Loss		1.3	1.6	dB
Insertion Loss Temperature Coefficient		0.003		dB/ ° C
Isolation	60	75		dB
Input VSWR		1.4	1.5	: 1
Output VSWR		1.4	1.5	: 1
RF Input Power (CW)			30	dBm
DC Power Dissipation		0.85		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)	120/50			mA
Input / Output Connectors	SMA-Female			
Finish	Gold Plated			
Material	Aluminum			
Sealing	Hermetically Sealed (Optional)			



Absolute Maximum Ratings

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

Ordering Information

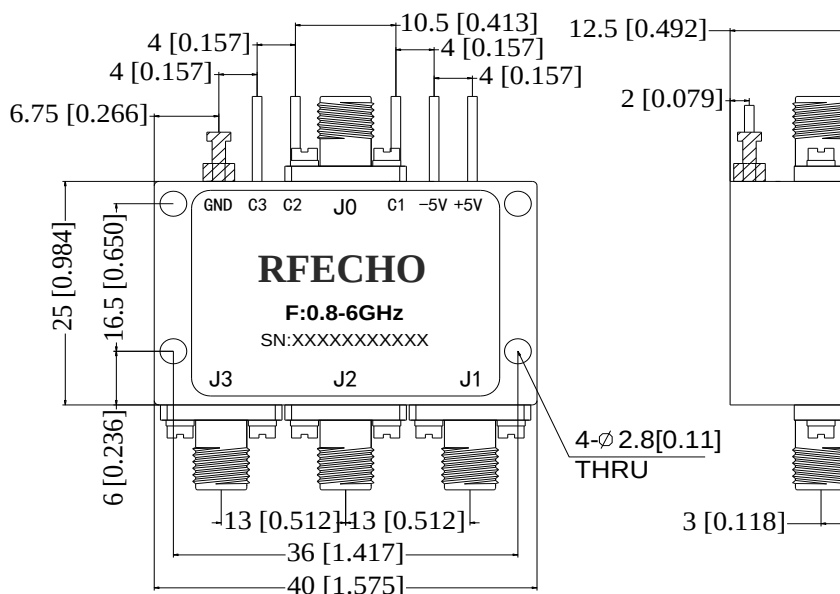
Part No.	Description
DBSA0300800600A	SP3T 0.8-6GHz PIN Diode Switch

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)

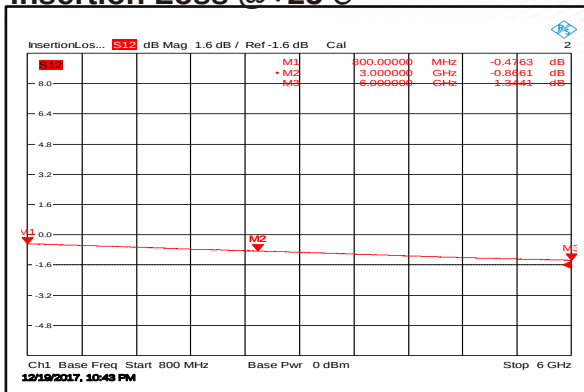


Truth Table

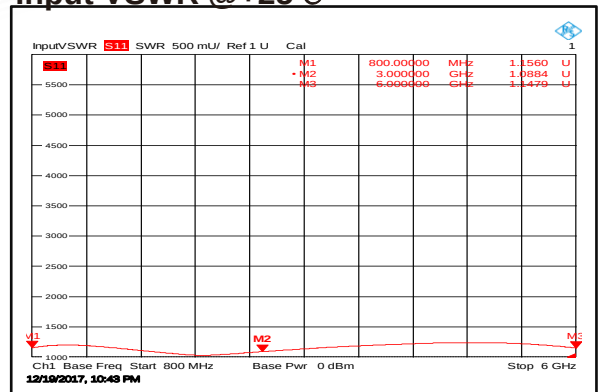
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V		
	High(1)=2.8~5V		
Control Input TTL			Signal Path State
C3	C2	C1	
1	1	1	Not Used
0	0	1	J0-J1
0	1	0	J0-J2
1	0	0	J0-J3
0	0	0	OFF
Control Pin Customization available upon request			



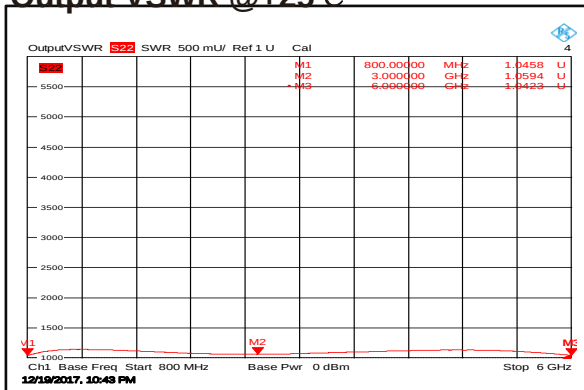
Insertion Loss @+25°C



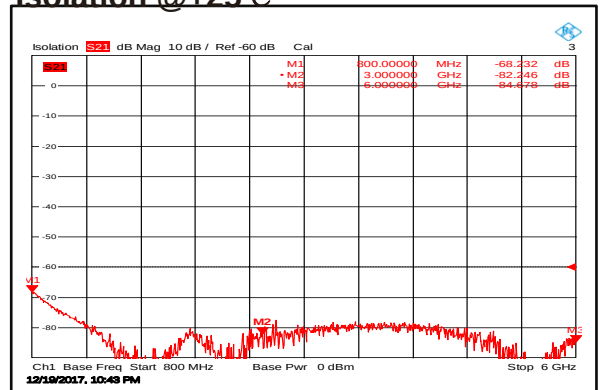
Input VSWR @+25°C



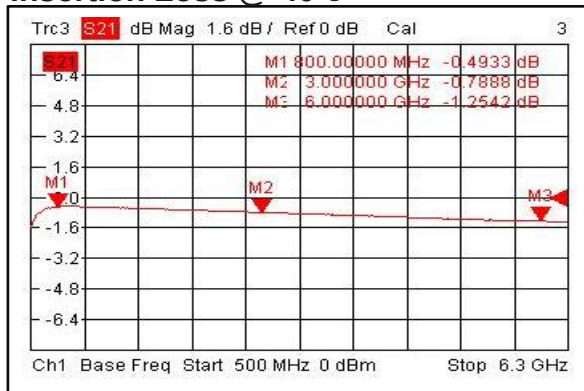
Output VSWR @+25°C



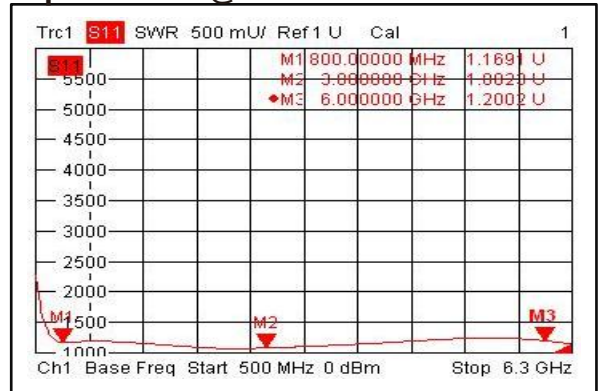
Isolation @+25°C



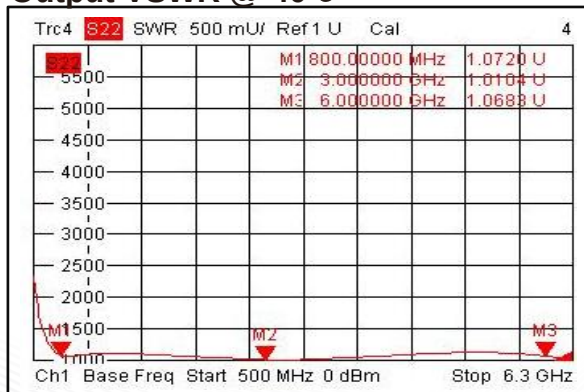
Insertion Loss @-40°C



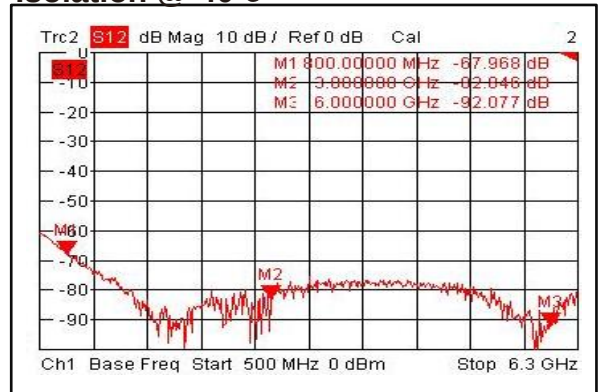
Input VSWR @-40°C



Output VSWR @-40°C

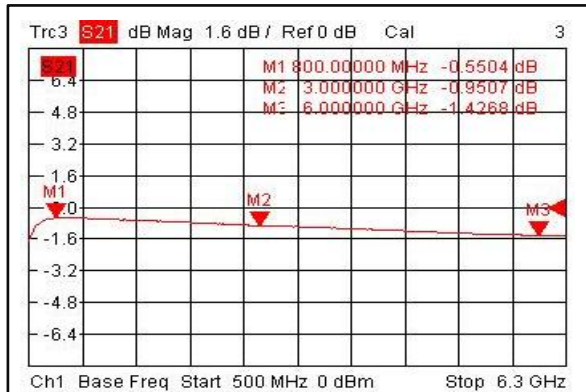


Isolation @-40°C

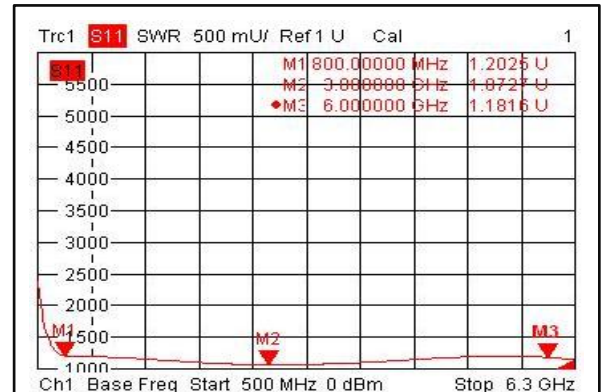




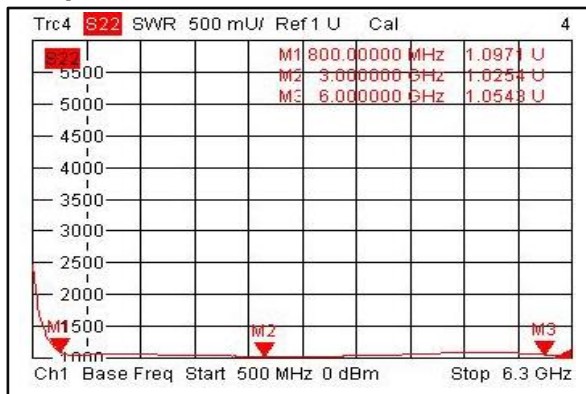
Insertion Loss @+85°C



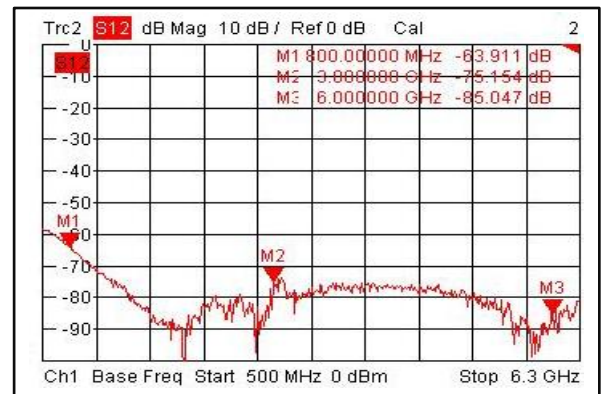
Input VSWR @+85°C



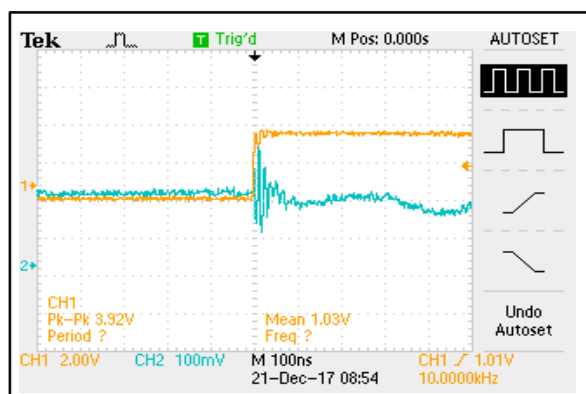
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

