



Absorptive Coaxial SP4T Switch 2-18GHz

Features

- Wide Band Operation 2-18GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- Temperature Range -40°C~+85°C
- Customization available upon request
- Hermetically sealed package up to 60,000ft 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	2~6			6~12			12~18			GHz
Insertion Loss		1.7	2.0		2.1	2.5		2.8	3.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ °C
Isolation	65	70		60	65		55	60		dB
Input VSWR		1.5	1.8		1.6	1.8		1.8	2.0	: 1
Output VSWR		1.5	1.8		1.6	1.8		1.8	2.0	: 1
RF Input power (CW)			30			30			30	dBm
Power Dissipation		1			1			1		W
0.1dB Compression Point (P0.1dB)		30			30			30		dBm
IIP3		55			55			55		dBm
Switching Speed	100 Max.									ns
Weight	1.5 Max.									ounces
Impedance	50									Ω
Bias Current (+5V/-12V)	150/50 Max.									mA
Input / Output Connectors	SMA - Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									



Absolute Maximum Ratings

Biasing	+5V $\pm$ 10%/-12V $\pm$ 10%
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Ordering Information

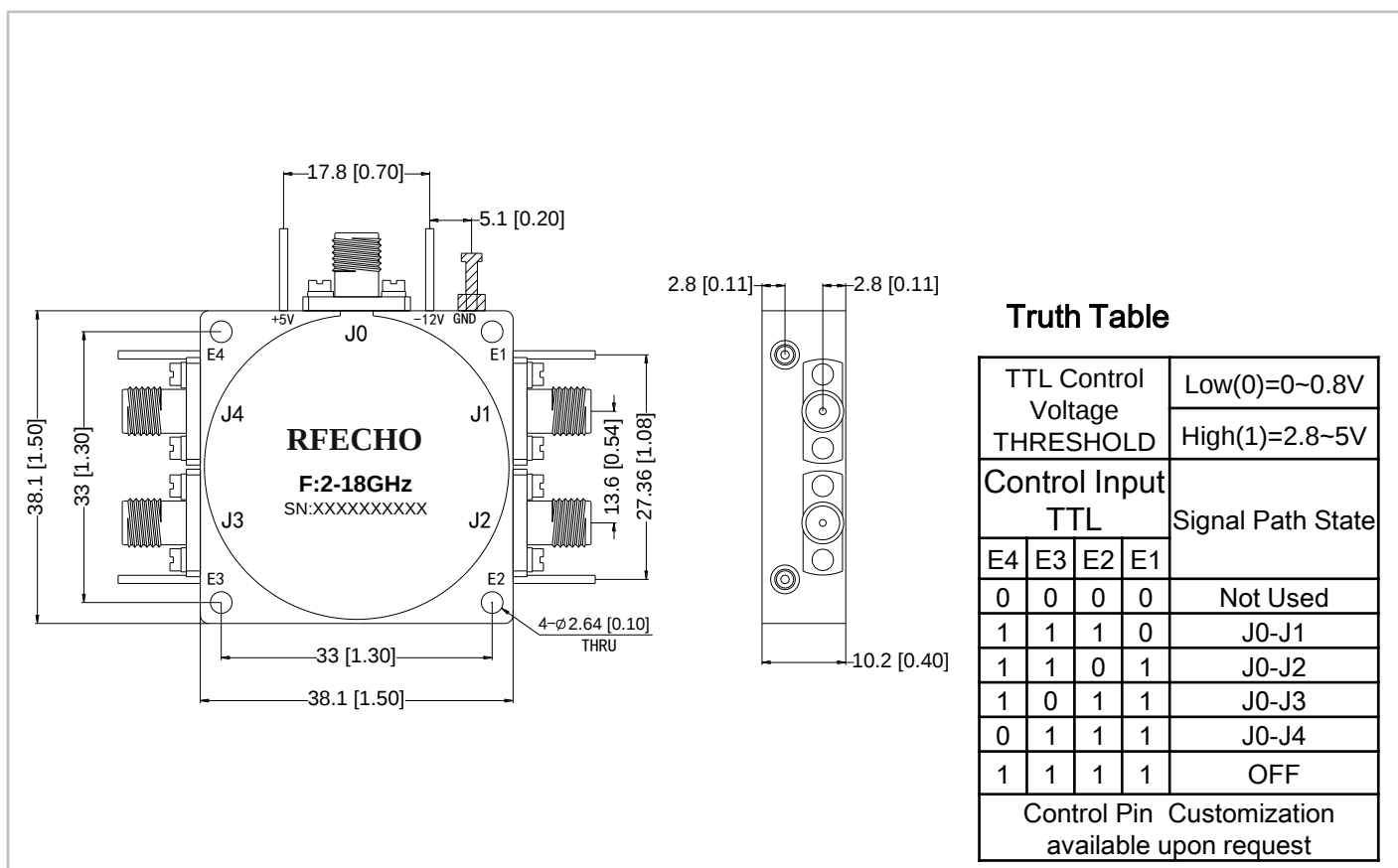
Part No.	Description
DBSA0402001800E	SP4T 2-18GHz PIN Diode Switch

Environmental Specifications

Operational Temperature	-40°C ~ +85°C (Case Temperature)
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

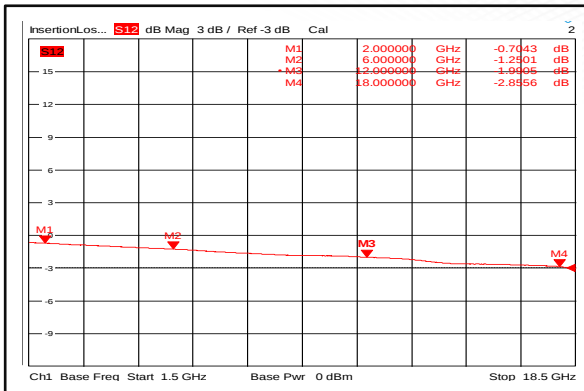
Outline Drawing:

All Dimensions in mm (inches)

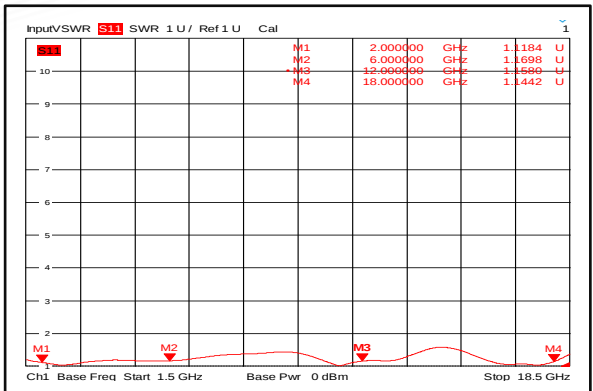




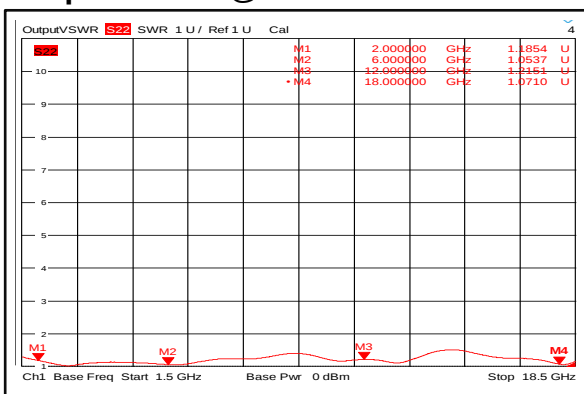
Insertion Loss @+25°C



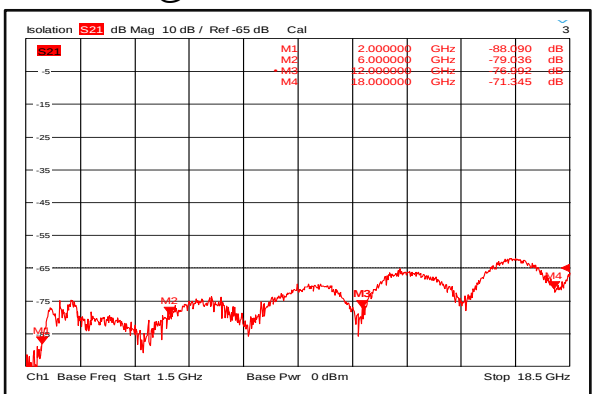
Input VSWR @+25°C



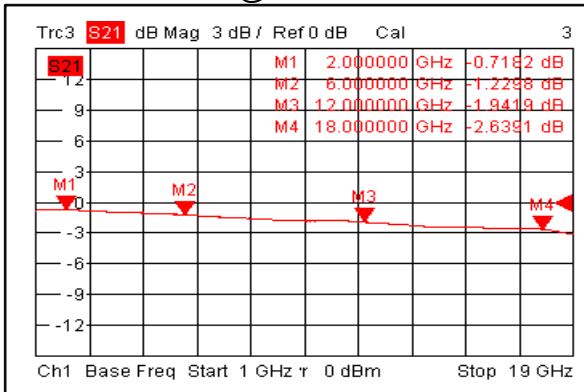
Output VSWR @+25°C



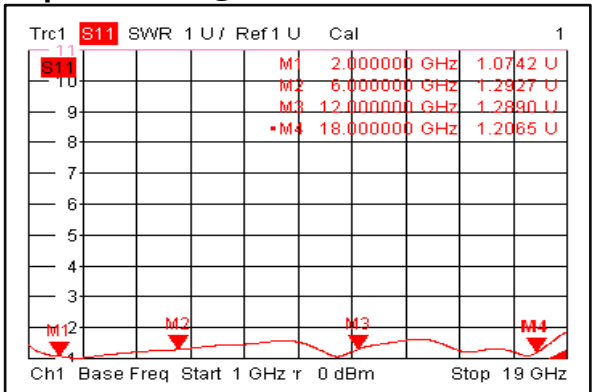
Isolation @+25°C



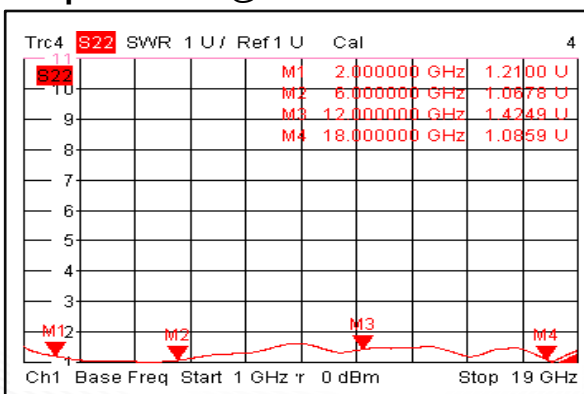
Insertion Loss @-40°C



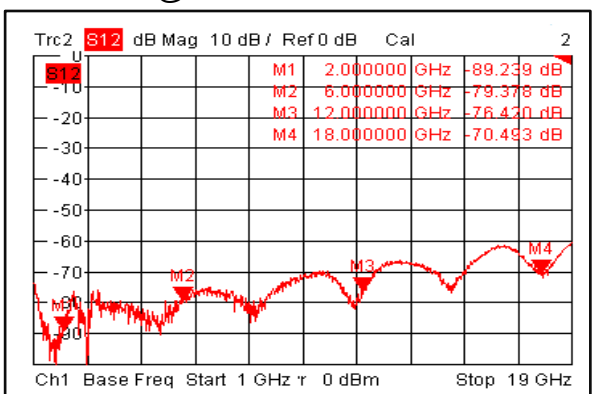
Input VSWR @-40°C



Output VSWR @-40°C

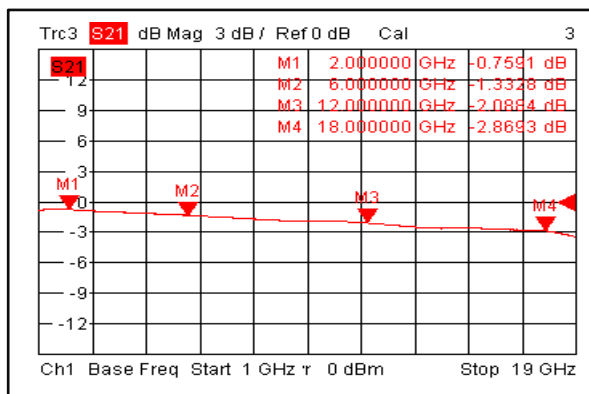


Isolation @-40°C

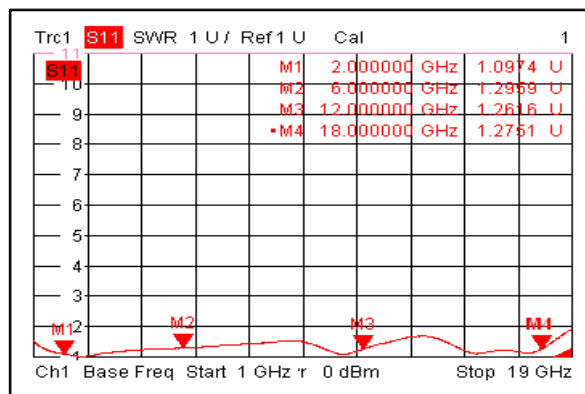




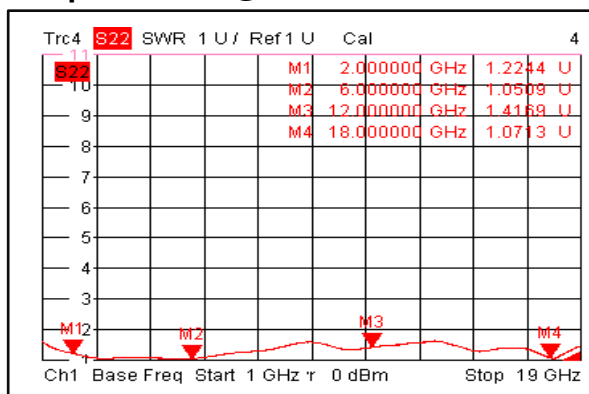
Insertion Loss @+85°C



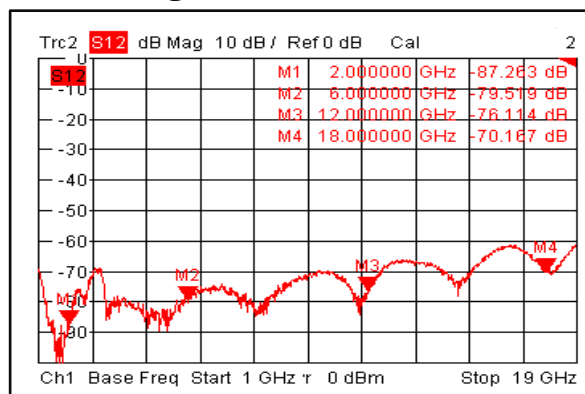
Input VSWR @+85°C



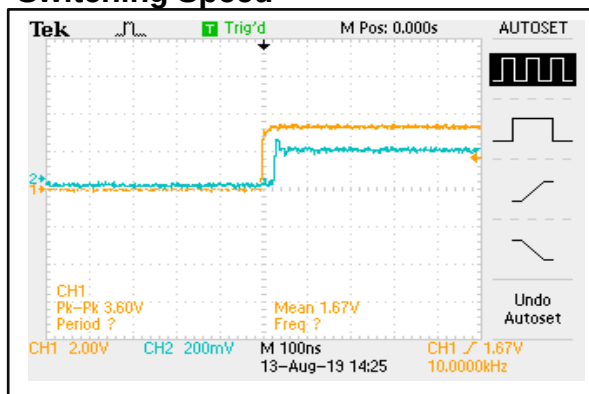
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

