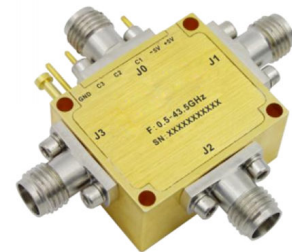




Absorptive 0.5-43.5GHz Coaxial SP3T Switch

Features

- Ultra Wide Band Operation 0.5-43.5GHz
- 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	0.5-18			18-30			30-43.5			GHz
Insertion Loss		3.5	4.5		4.5	5.0		5	6.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ °C
Isolation	60	68		50	53		45	50		dB
Input VSWR		2	2.5		2	2.5		2	2.5	: 1
Output VSWR		2	2.5		2	2.5		2	2.5	: 1
RF Input power Pulse 10% Duty cycle (10us)			+23			+23			+23	dBm
DC Power Dissipation		0.6			0.6			0.6		W
0.1dB Compression Point(P0.1dB)		23			23			23		dBm
IIP3		55			50			45		dBm
Switching Speed			50			50			50	ns
Weight	0.71									Ounces
Impedance	50									Ω
Bias Current (+5V / -5V)	120/50									mA
Input / Output Connectors	2.92mm-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									



Absolute Maximum Ratings

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

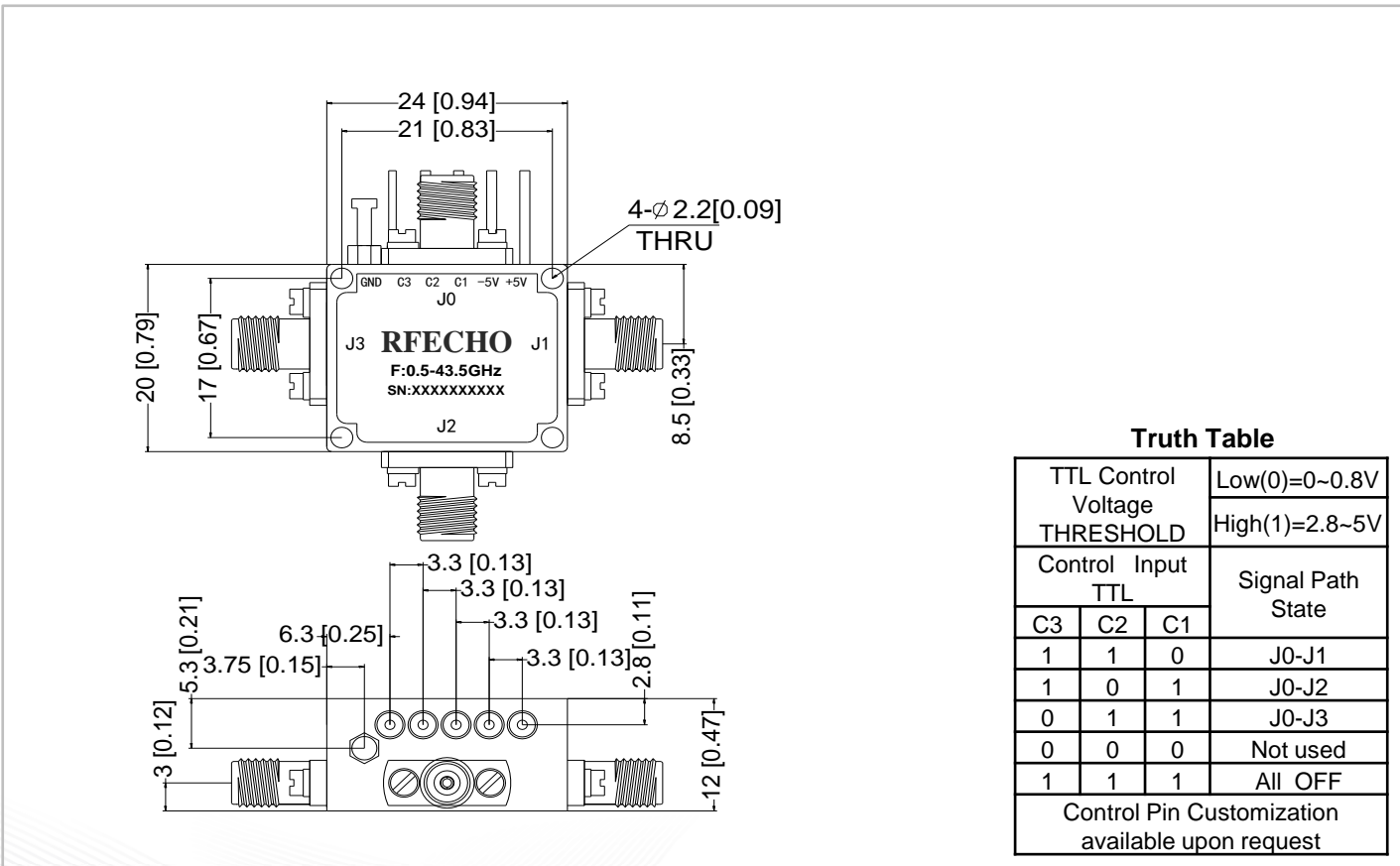
Part No.	Description
DBSA0300504350A	SP3T 0.5-43.5GHz PIN Diode Switch

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

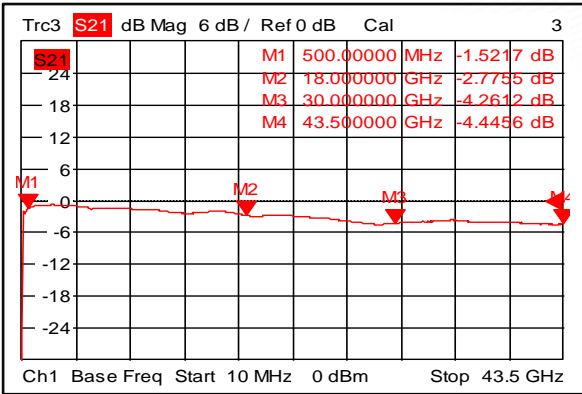
Outline Drawing:

All Dimensions in mm (inches)

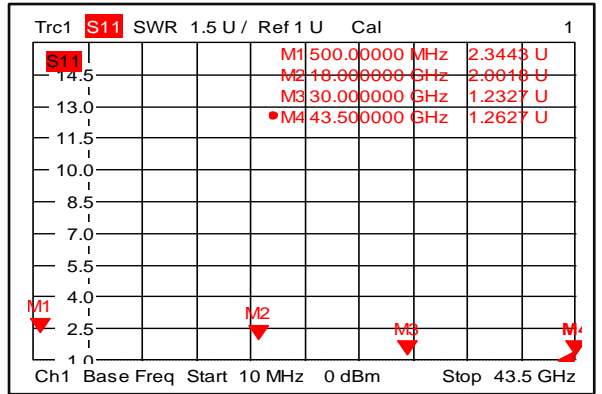




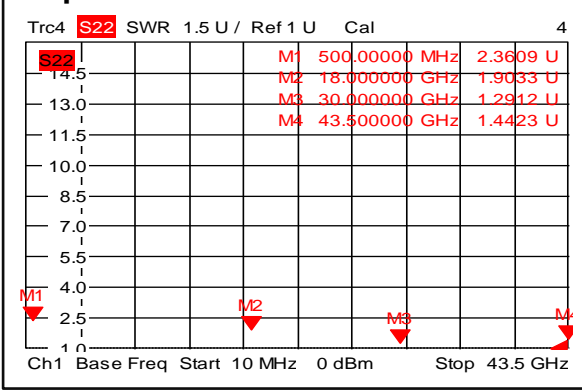
Insertion Loss @+25°C



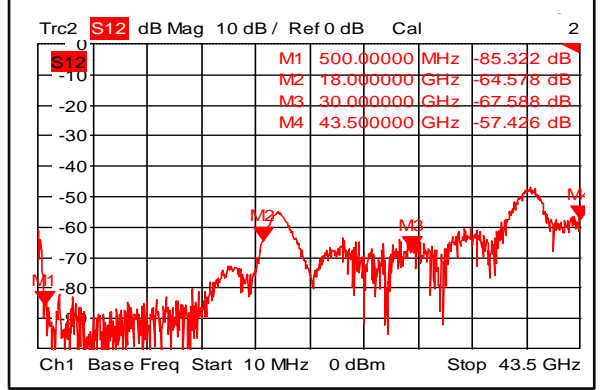
Input VSWR @+25°C



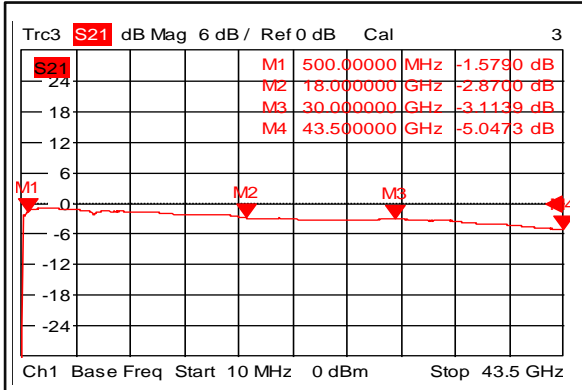
Output VSWR @+25°C



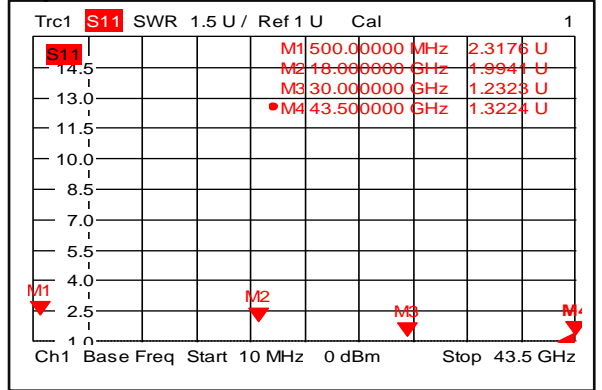
Isolation @+25°C



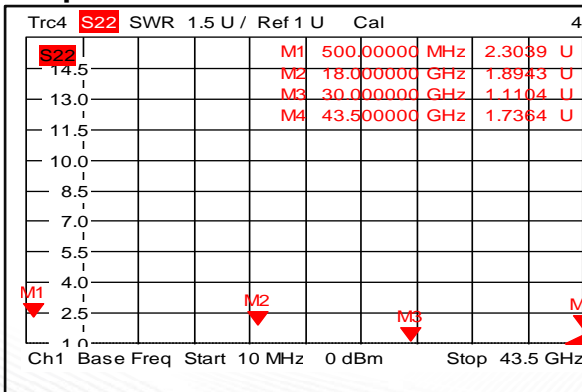
Insertion Loss @-40°C



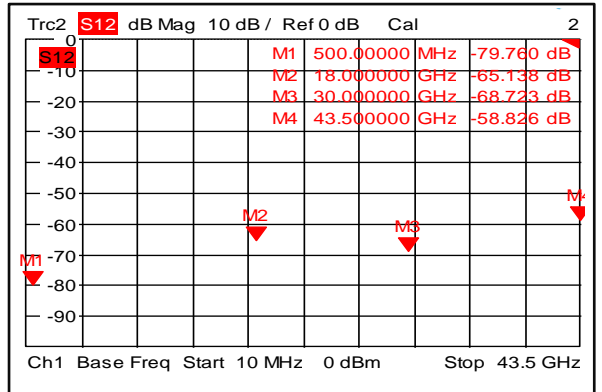
Input VSWR @-40°C



Output VSWR @-40°C

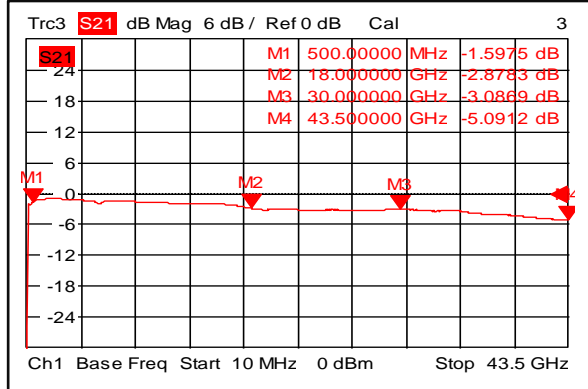


Isolation @-40°C

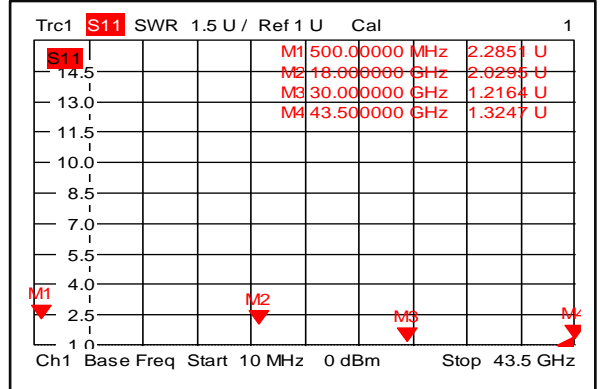




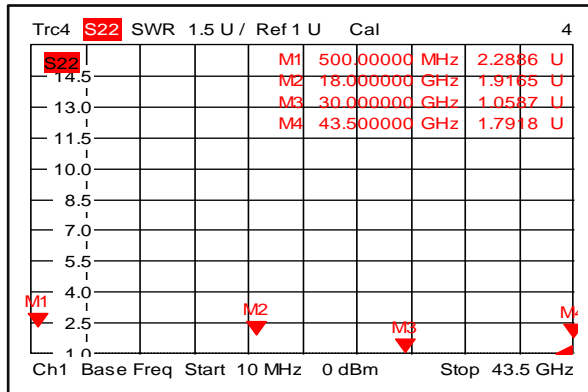
Insertion Loss @+85°C



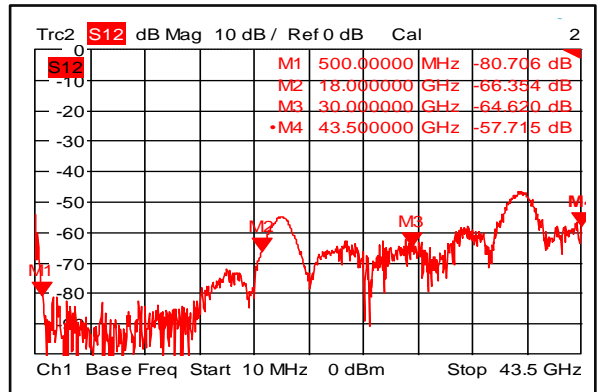
Input VSWR @+85°C



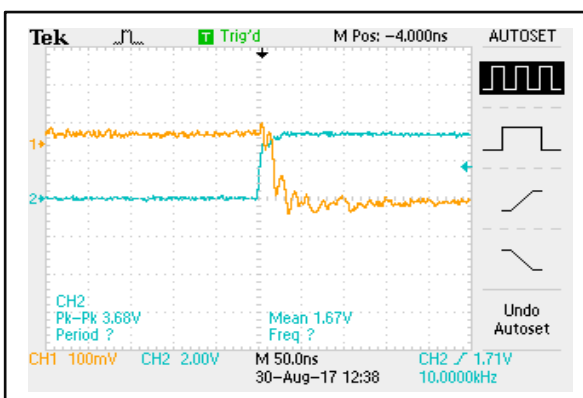
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

