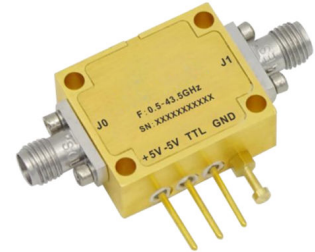




Absorptive 0.5-43.5GHz Coaxial SPST Switch

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	0.5-8			8-26.5			26.5-43.5			GHz
Insertion Loss		2.5	3.0		3.5	4.0		4.8	5.2	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ °C
Isolation (J0-J1)	70	80		60	65		50	61		dB
Input VSWR		2.5	3		2	2.5		2.4	2.5	: 1
Output VSWR		2.5	3		2	2.5		2.4	2.5	: 1
RF Input power			23			23			23	dBm
DC Power Dissipation		0.3			0.3			0.3		W
0.1dB Compression Point (P0.1dB)		23			23			23		dBm
IIP3		50			50			50		dBm
Switching Speed	100									ns
Weight	1.8									ounces
Impedance	50									Ω
Bias Current (+5V / -5V)	50/50									mA
Input / Output Connectors	2.92-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (optional)									



Absolute Maximum Ratings

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

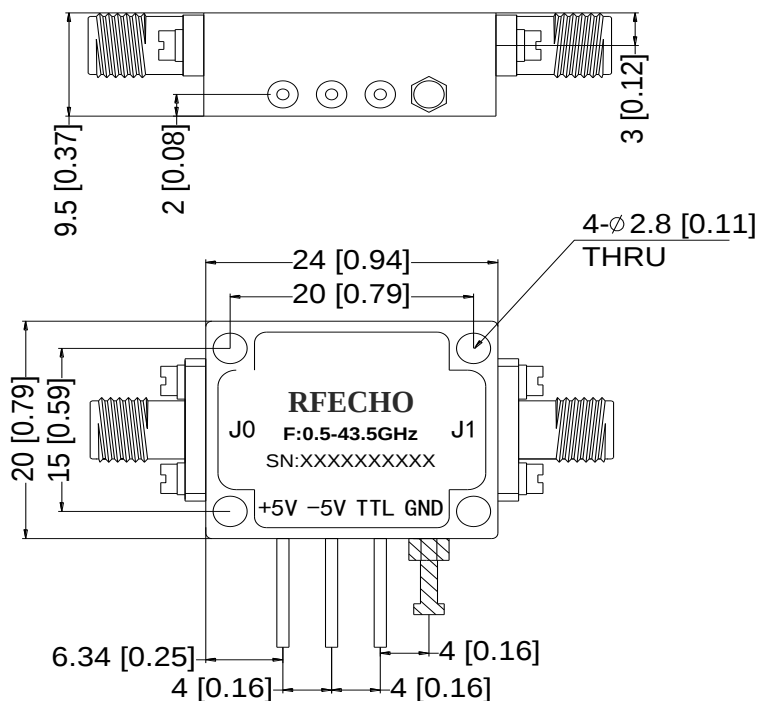
Part No.	Description
DBSA0100504350C	SPST 0.5-43.5GHz PIN Diode Switch

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)



Notes:

J0: Absorptive Port

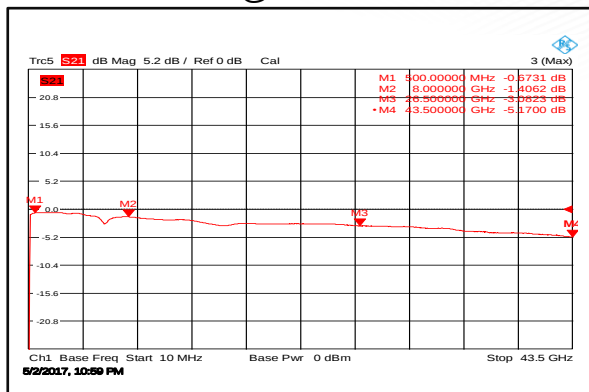
J1: Reflective port

Truth Table

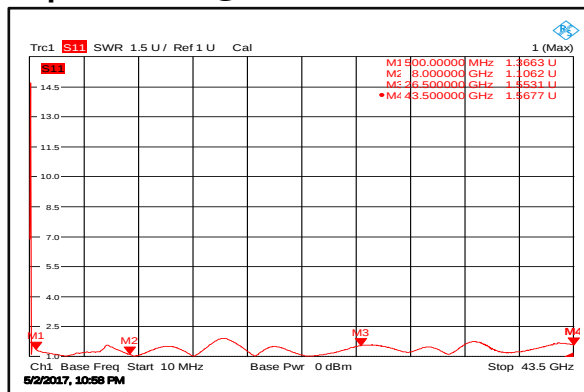
TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V
Control Input TTL	State
0	ON
1	OFF
Control Pin Customization available upon request	



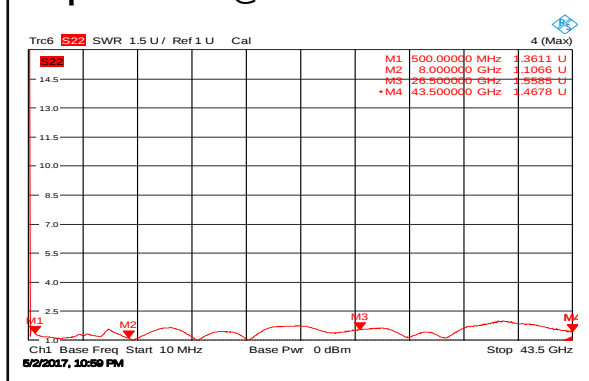
Insertion Loss @+25°C



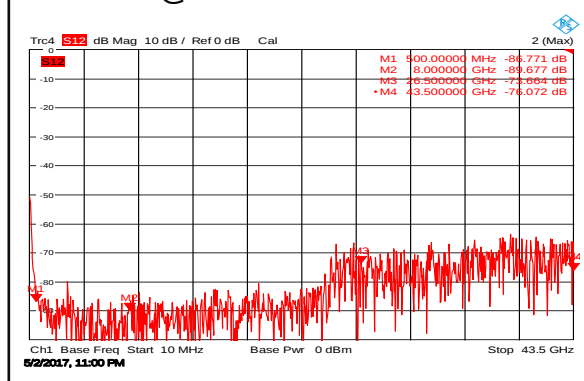
Input VSWR @+25°C



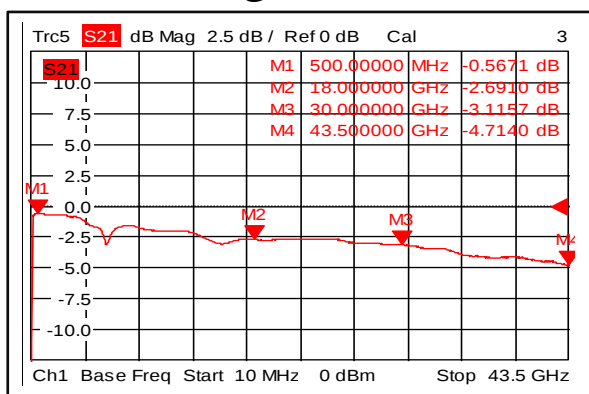
Output VSWR @+25°C



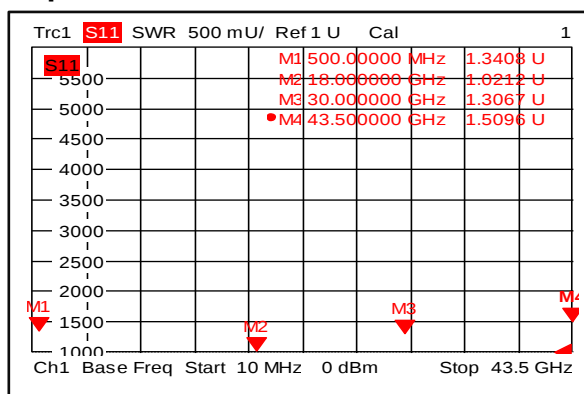
Isolation @+25°C



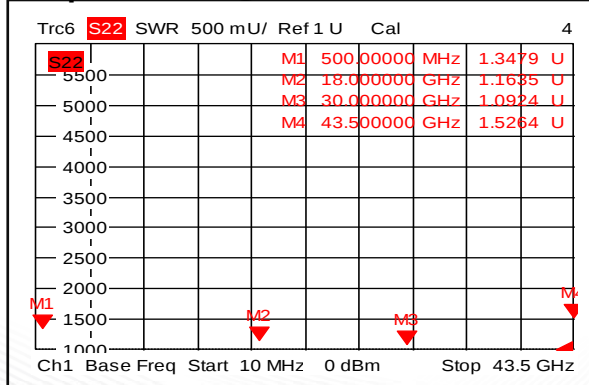
Insertion Loss @-40°C



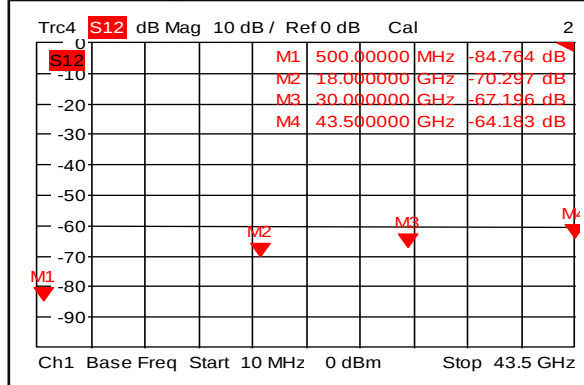
Input VSWR @-40°C



Output VSWR @-40°C

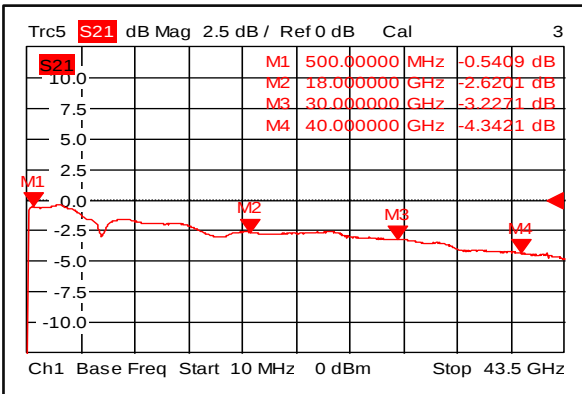


Isolation @-40°C

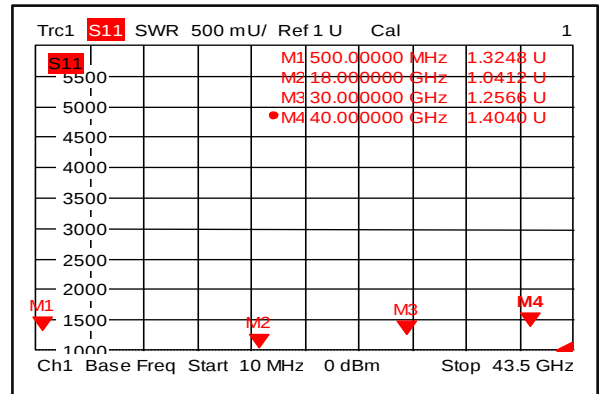




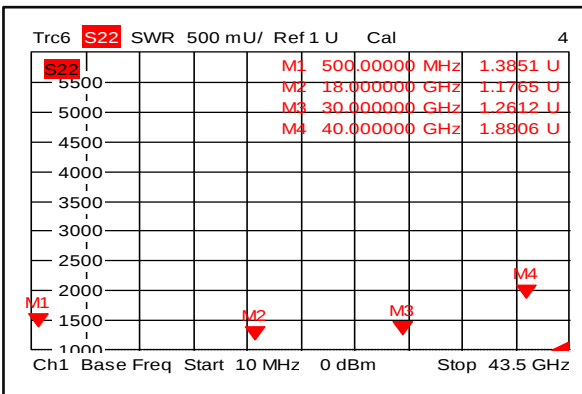
Insertion Loss @+85°C



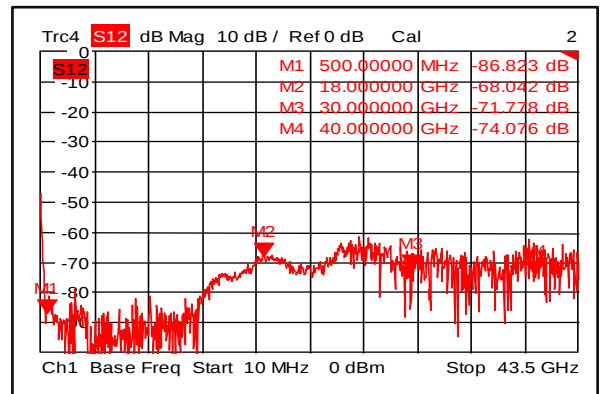
Input VSWR @+85°C



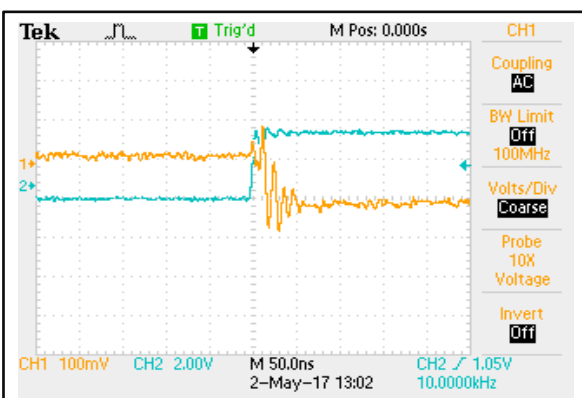
Output VSWR @+85°C



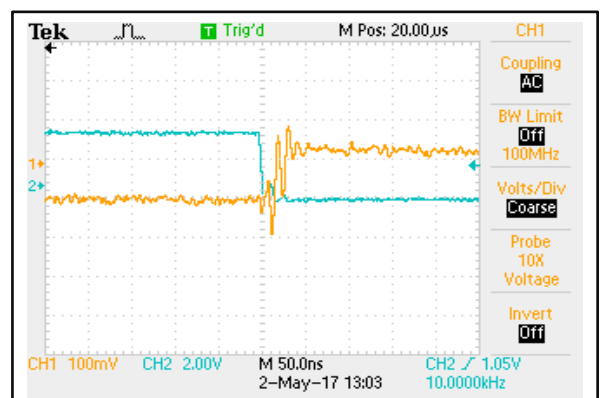
Isolation @+85°C



Switching Speed



Switching Speed





RFecho
A Gateway to RFWorld