

# USB / Ethernet Absorptive Coaxial SP2T Switch 0.5-43.5GHz

## Features

- Wide Band Operation 0.5-43.5GHz
- USB Controlled and Powered.
- Low Insertion Loss and High Isolation
- Customization available upon request
- Control SW included.



Typical Applications	<ul style="list-style-type: none"> <li>• Wireless Infrastructure</li> <li>• Test and measurement Instrument</li> <li>• Fiber Optics</li> </ul>	RF Microwave & VSAT 5G communication
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Parameter	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		2.0	2.5		4.0	4.5		4.5	5.2	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ $^{\circ}$ C
Isolation	60	85		50	60		45	55		dB
Input VSWR		1.6	2.0		2.5	2.8		1.8	2.5	: 1
Output VSWR		1.6	2.0		2.5	2.8		1.8	2.5	: 1
RF Input power (CW)			23			23			23	dBm
DC Power Dissipation		0.6			0.6			0.6		W
0.1dB Compression Point (P 0.1dB)		23			23			23		dBm
IIP3		48			40			38		dBm
Weight					3 Max.					ounces
Impedance					50					$\Omega$
Current					210 Typ.					mA
Power Supply					USB(+5.0V)					
Control Interface					USB2.0 & Ethernet(IPv4) (Control Cable Included)					
Input / Output Connectors					2.92mm-Female					
Finish					Nickel Plated					
Material					Aluminum					

## Ordering Information

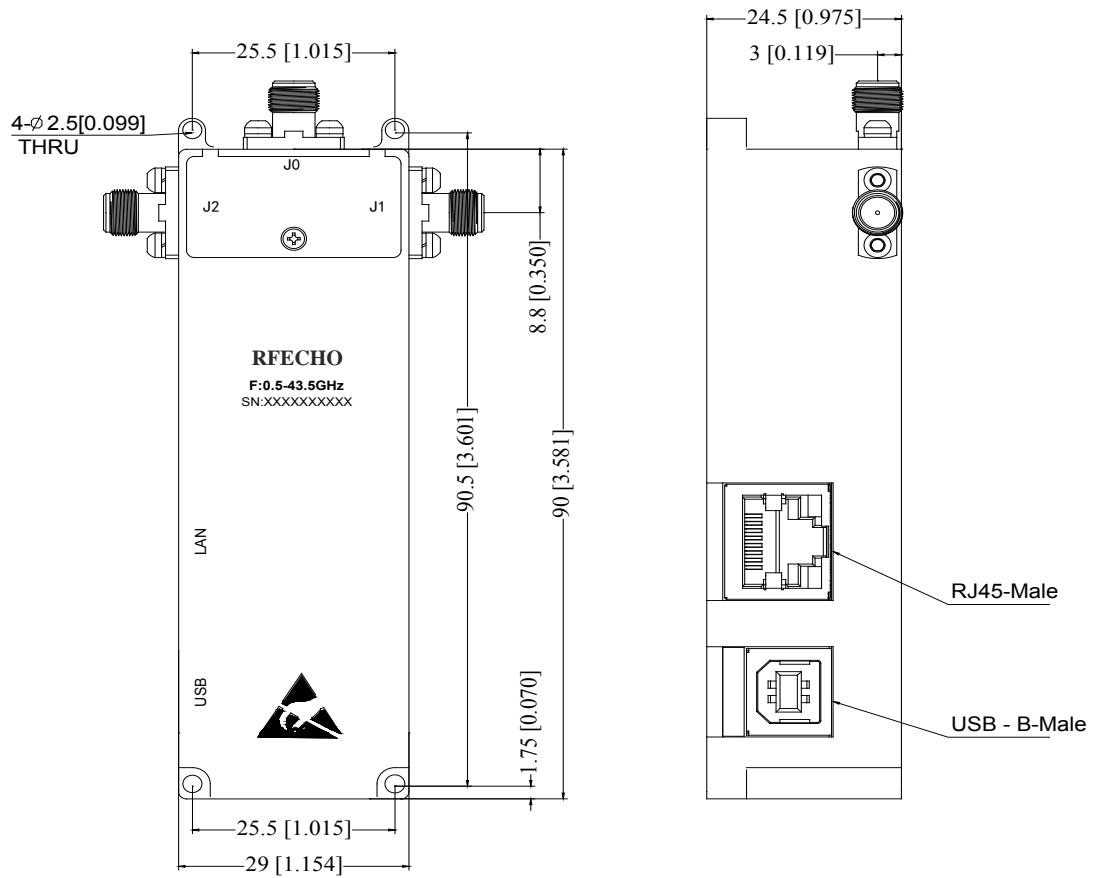
Part No.	ECCN	Description
DBSA0200504350D	EAR99	SP2T 0.5-43.5GHz PIN Diode Switch

## Environmental Specifications

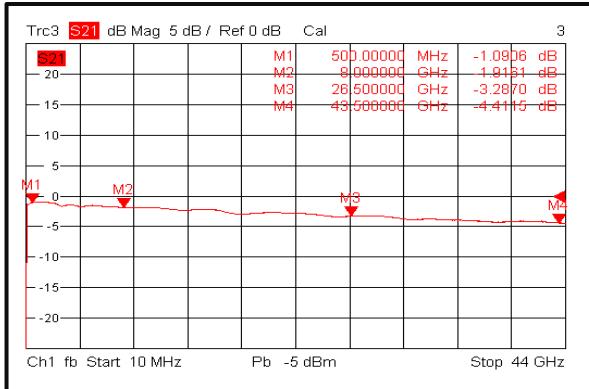
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Shock	20G for 11msec half sine wave, 3 axis both directions

## Outline Drawing:

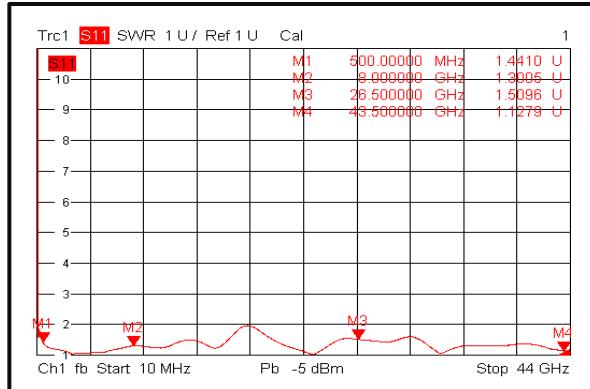
All Dimensions in mm (inches) Tolerances  $\pm 0.1$  (0.004)



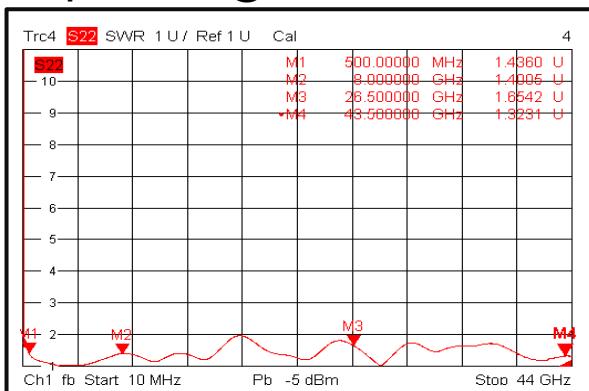
### Insertion Loss @+25°C



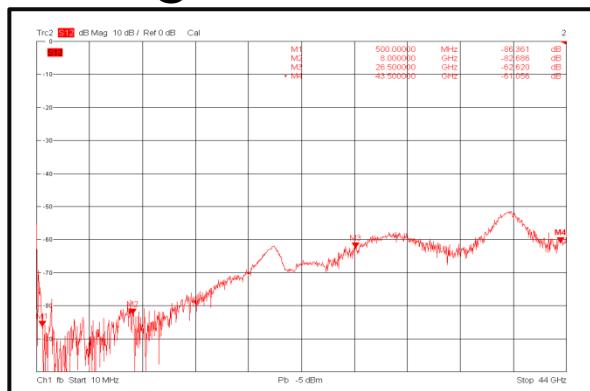
### Input VSWR @+25°C



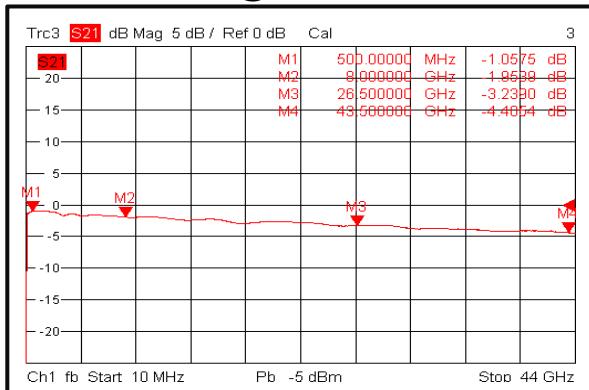
### Output VSWR @+25°C



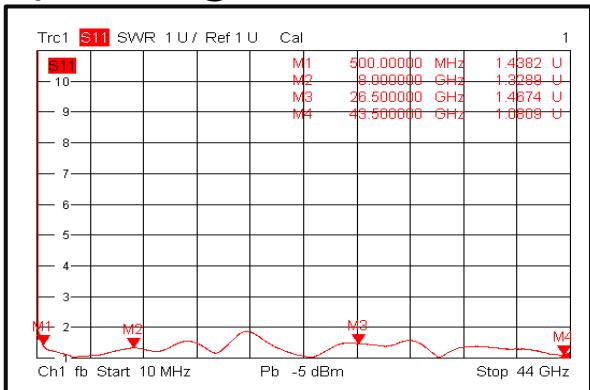
### Isolation @+25°C



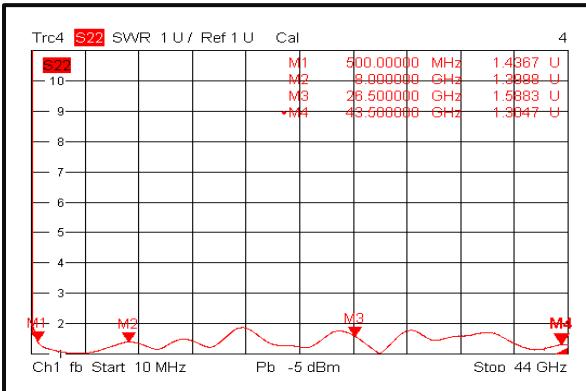
### Insertion Loss @-40°C



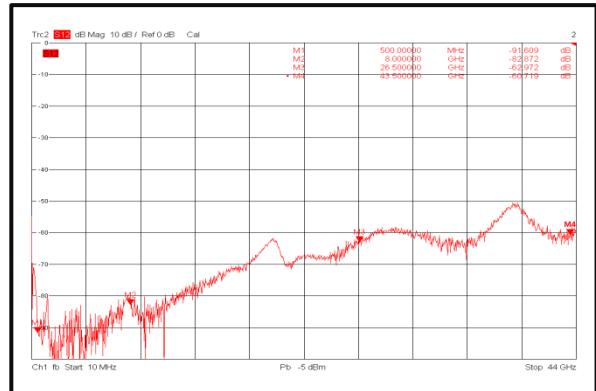
### Input VSWR @-40°C



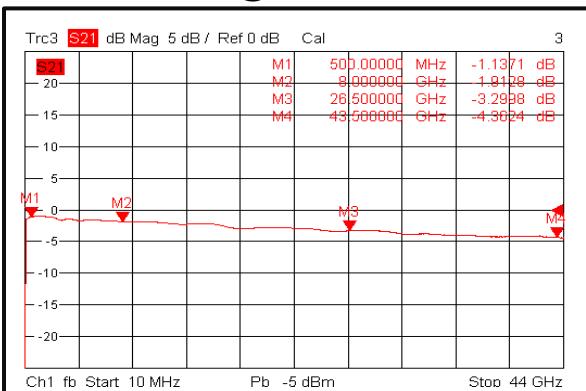
### Output VSWR @-40°C



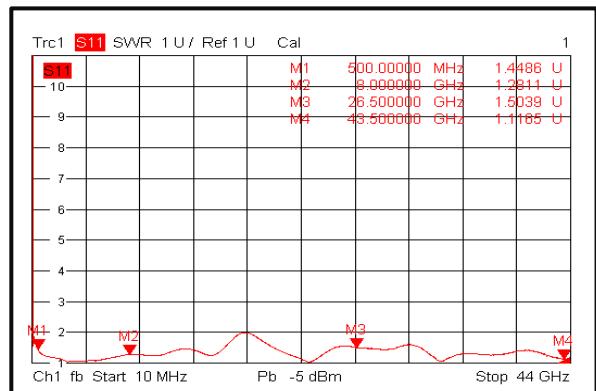
### Isolation @-40°C



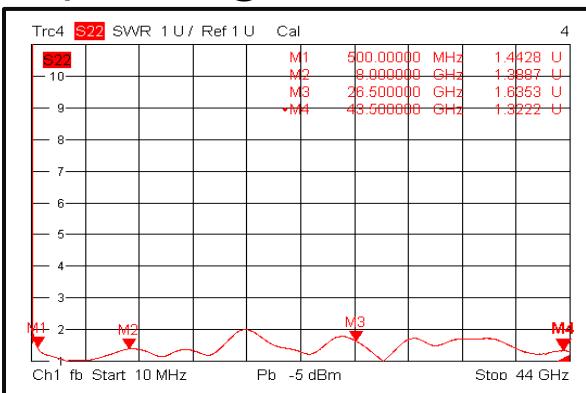
### Insertion Loss @+85°C



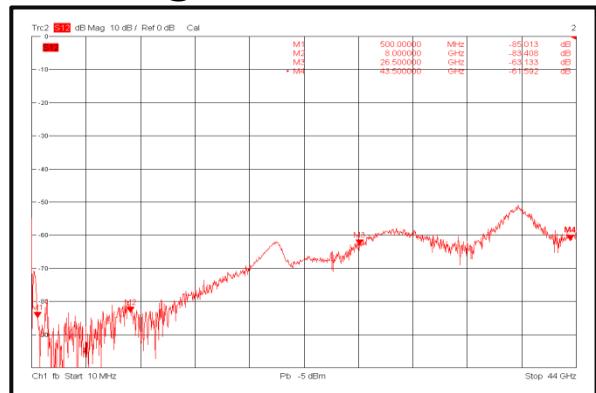
### Input VSWR @+85°C



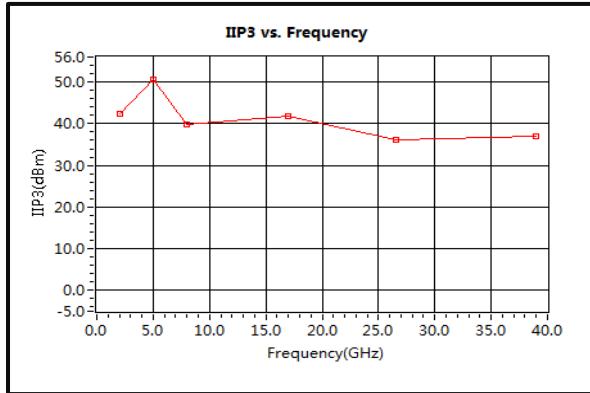
### Output VSWR @+85°C



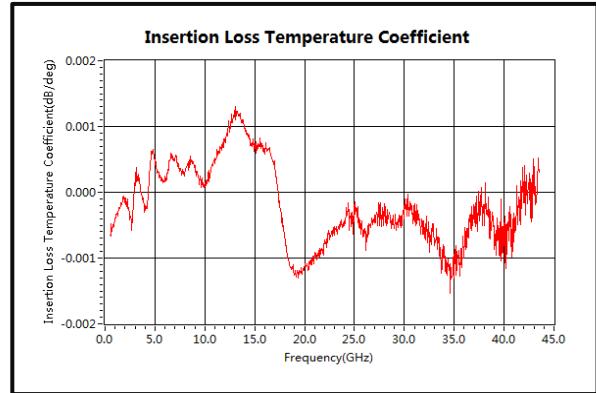
### Isolation @+85°C



## IIP3



## Insertion Loss Temperature Coefficient



## Insertion Loss vs. Temperature

