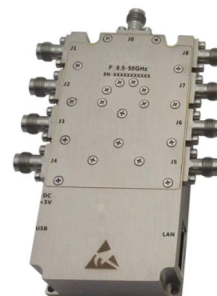




USB Absorptive Coaxial SP8T Switch 0.5 - 50GHz

Features

- Ultra Wide Band Operation 0.5-50GHz
- USB / Ethernet Control
- Low Insertion Loss and High Isolation
- Customization available upon request
- Control SW included.



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	0.1-18			18-43.5			43.5-50			GHz
Insertion Loss		5.5	6.5		7.5	8.5		9.5	10.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ ° C
Isolation	50	65		48	55		45	53		dB
Input VSWR		2	3		2.5	3		2	2.5	: 1
Output VSWR		2	3		2.5	3		2	2.5	: 1
RF Input Power (CW)			23			23			23	dBm
DC Power Dissipation		1.5			1.5			1.5		W
0.1dB Compression Point (P 0.1dB)		23			23			23		dBm
IIP3		43			38			33		dBm
Weight	4.8 Max.									ounces
Impedance	50									Ω
Bias Current	320 Typ.									mA
Power Supply	DC (+5.0V)									
Control Interface	USB2.0 & Ethernet(IPv4) (Control Cable Included)									
Input / Output Connectors	2.4mm-Female									
Finish	Nickel Plated									
Material	Aluminum									



Ordering Information

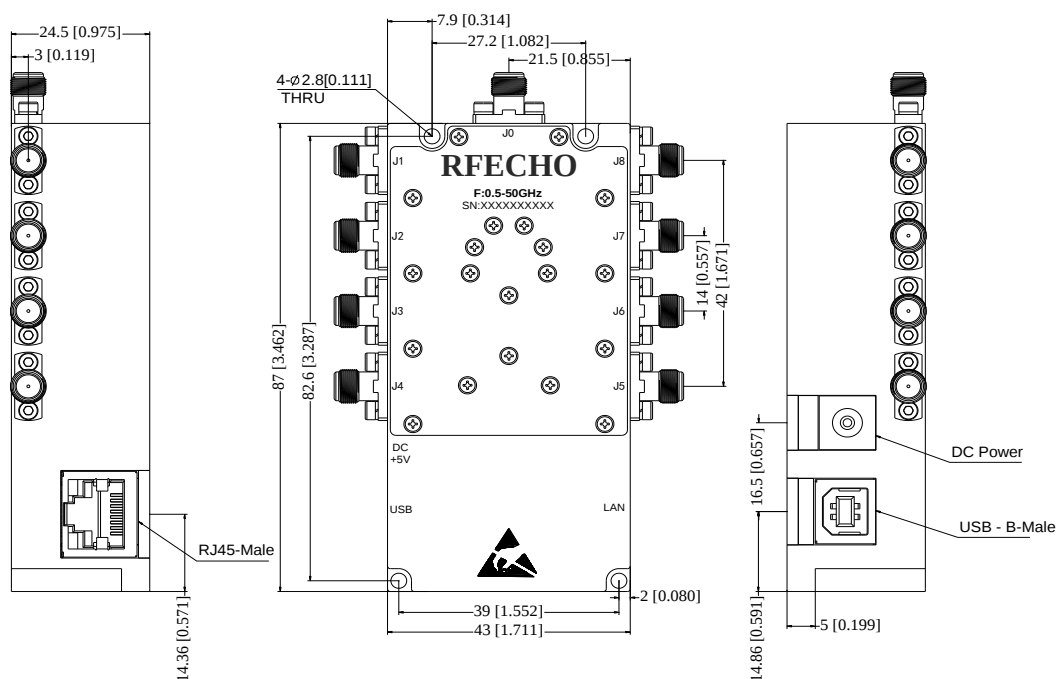
Part No.	Description
DBSA0800505000A	SP8T 0.5-50GHz PIN Diode Switch

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

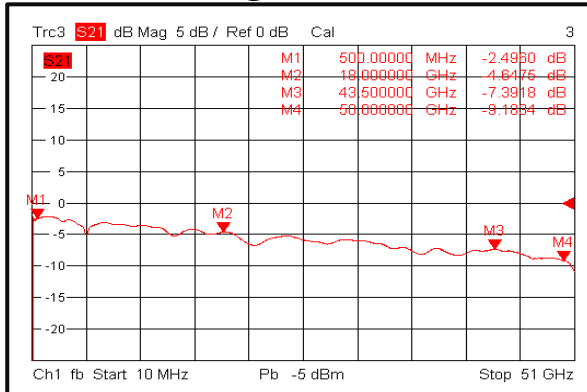
Outline Drawing:

All Dimensions in mm (inches)

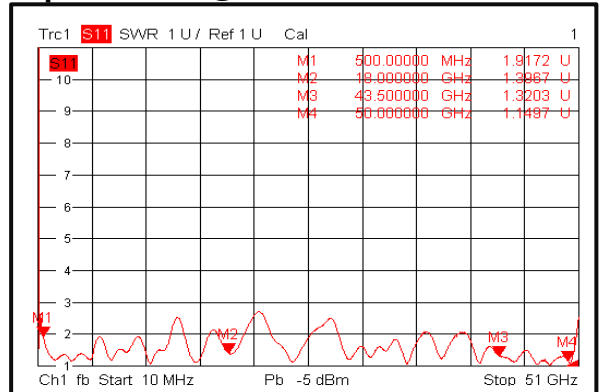




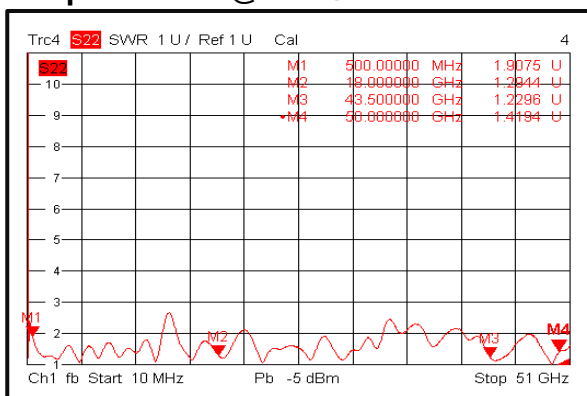
Insertion Loss @+25°C



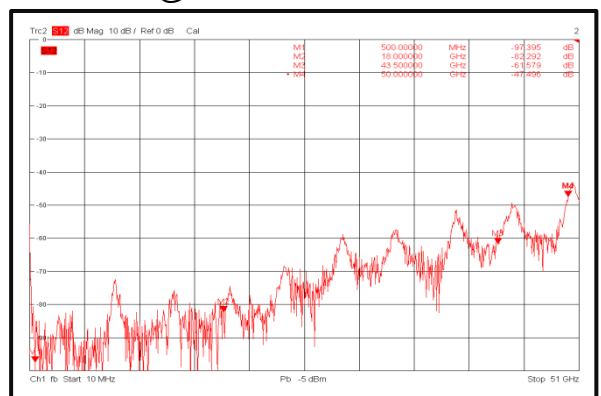
Input VSWR @+25°C



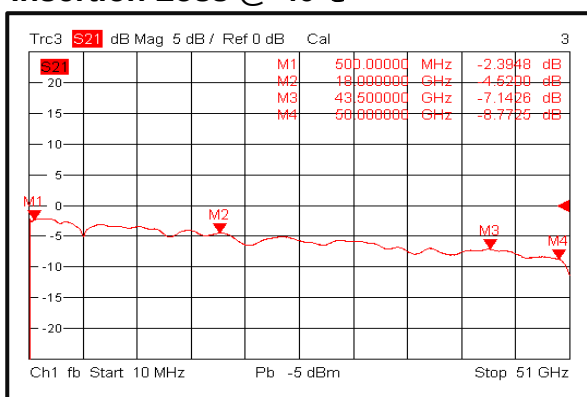
Output VSWR @+25°C



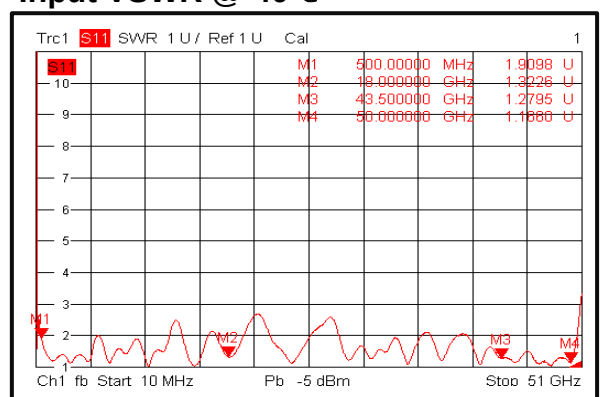
Isolation @+25°C



Insertion Loss @-40°C

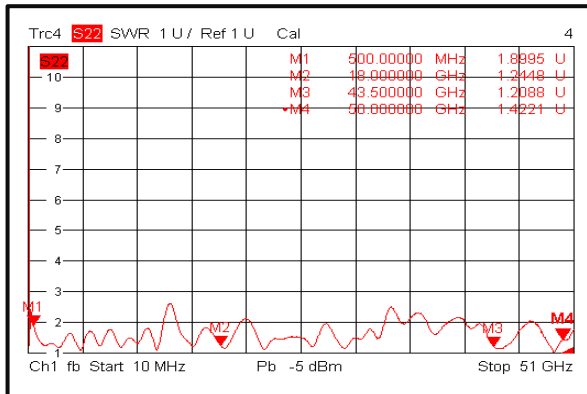


Input VSWR @-40°C

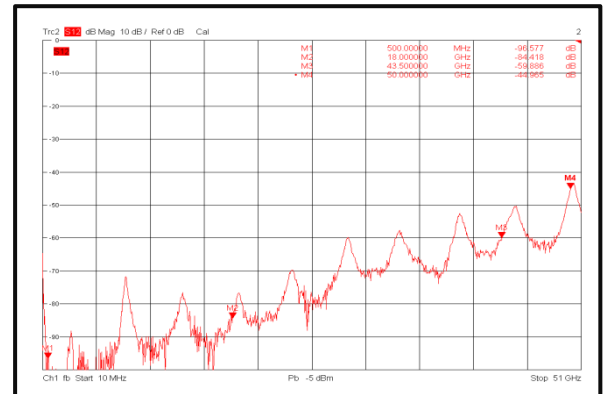




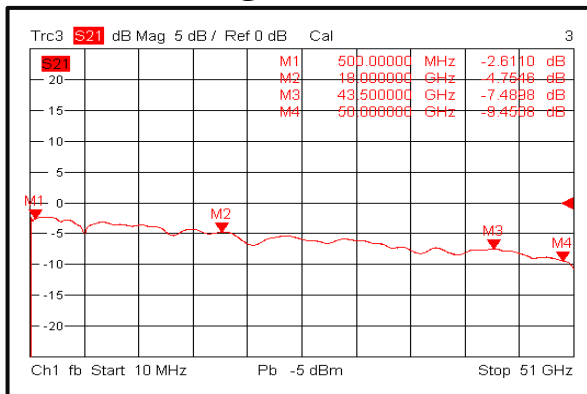
Output VSWR @-40°C



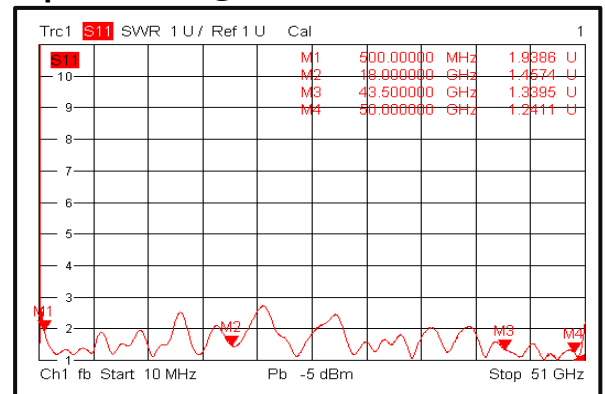
Isolation @-40°C



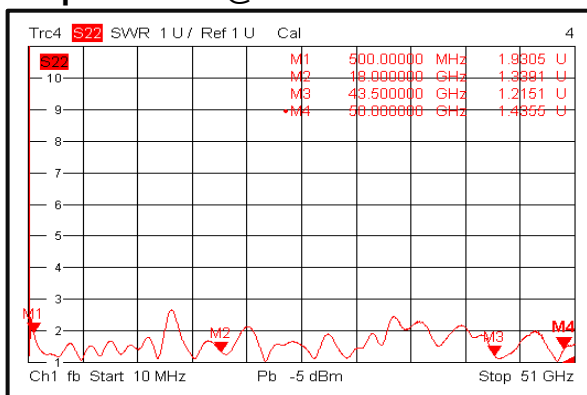
Insertion Loss @+85°C



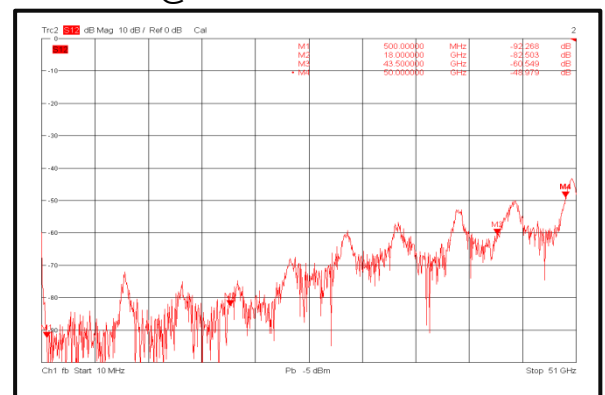
Input VSWR @+85°C



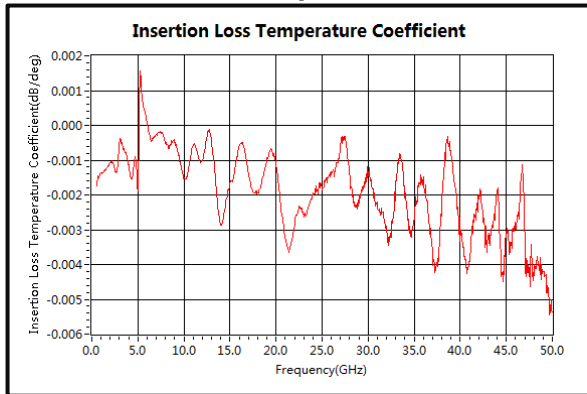
Output VSWR @+85°C



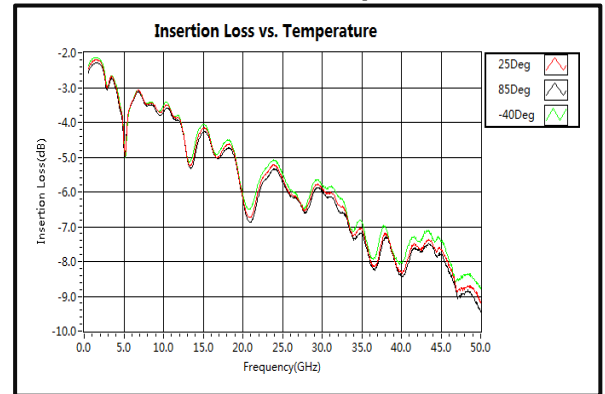
Isolation @+85°C



Insertion Loss Temperature Coefficient



Insertion Loss vs. Temperature



IIP3

