

USB / Ethernet Absorptive Coaxial SP2T Switch 0.5-50GHz

Features

- Wide Band Operation 0.5-50GHz
- USB Controlled and Powered.
- 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

| Parameter | Min. | Typ. | Max. | Min. | Typ. | Max. | Min. | Typ. | Max. | Units | | |
|--|---|-------|------|---------|-------|------|---------|-------|--------|--------|--|--|
| Frequency Range | 0.1-18 | | | 18-43.5 | | | 43.5-50 | | | GHz | | |
| Insertion Loss | | 3.3 | 4 | | 4.5 | 5 | | 6.2 | 7.5 | dB | | |
| Insertion Loss Temperature Coefficient | | 0.003 | | | 0.003 | | | 0.003 | | dB/ °C | | |
| Isolation | 50 | 65 | | 40 | 50 | | 50 | 55 | | dB | | |
| Input VSWR | | 1.8 | 2.5 | | 2.5 | 3 | | 2 | 2.5 | : 1 | | |
| Output VSWR | | 1.8 | 2.5 | | 2.5 | 3 | | 2 | 2.5 | : 1 | | |
| RF Input Power (CW) | | | 23 | | | 23 | | | 23 | dBm | | |
| DC Power Dissipation | | 0.95 | | | 0.95 | | | 0.95 | | W | | |
| 0.1dB Compression Point (P 0.1dB) | | 23 | | | 23 | | | 23 | | dBm | | |
| IIP3 | | 40 | | | 40 | | | 38 | | dBm | | |
| Weight | 2.9 Max. | | | | | | | | ounces | | | |
| Impedance | 50 | | | | | | | | Ω | | | |
| Bias Current | 210 Max. | | | | | | | | mA | | | |
| Power Supply | USB(+5.0V) | | | | | | | | | | | |
| Control Interface | USB2.0 & Ethernet(IPv4) (Control Cable Included) | | | | | | | | | | | |
| Input / Output Connectors | 2.4mm-Female | | | | | | | | | | | |
| Finish | Nickel Plated | | | | | | | | | | | |
| Material | Aluminum | | | | | | | | | | | |

Ordering Information

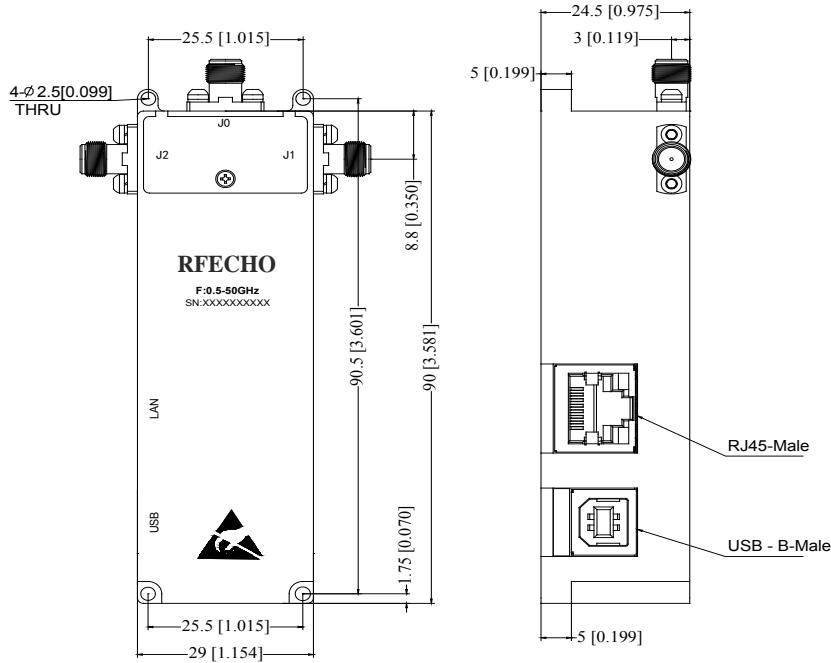
| Part No. | Description |
|-----------------|--|
| DBSA0200505000A | SP2T 0.5-50GHz USB / Ethernet Control Switch |

Environmental Specifications

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

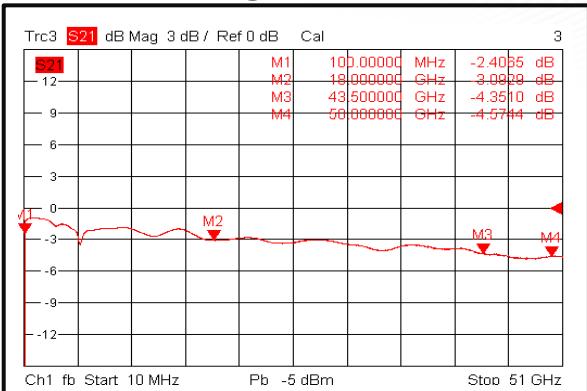
Outline Drawing:

All Dimensions in mm (inches)

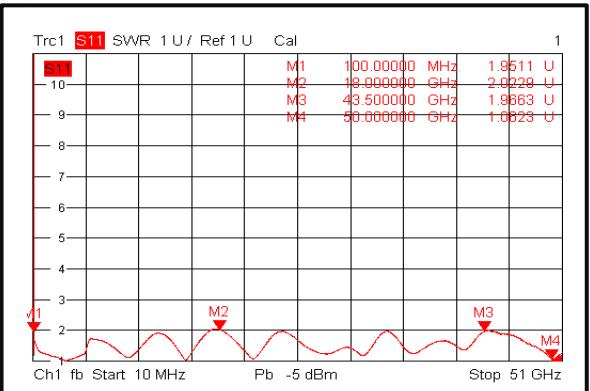


| ID | Packing List | QTY |
|----|--|-----|
| 1 | Fig a. USB/Ethernet Control RF Switch | 1 |
| 2 | Fig b. USB2.0 Cable (5 feet / 1.5 meter) | 1 |
| 3 | Fig c. Network Cable (6 feet / 2 meter) | 1 |

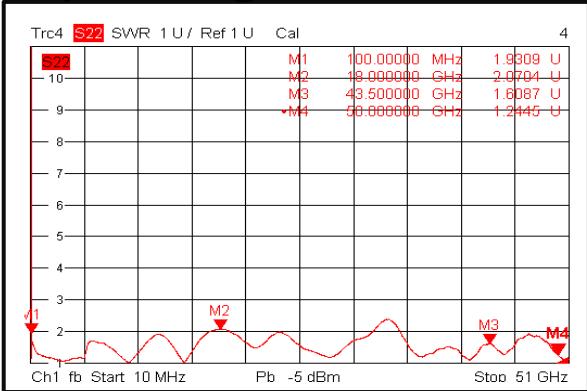
Insertion Loss @+25°C



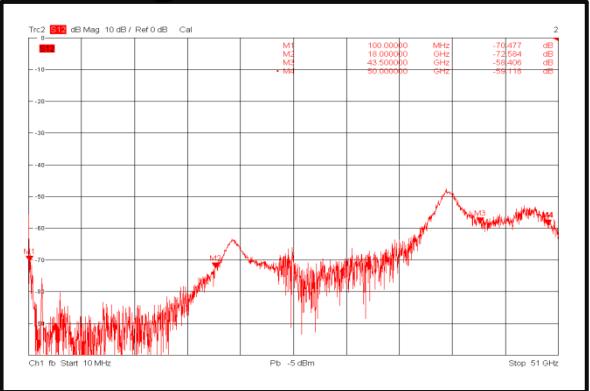
Input VSWR @+25°C



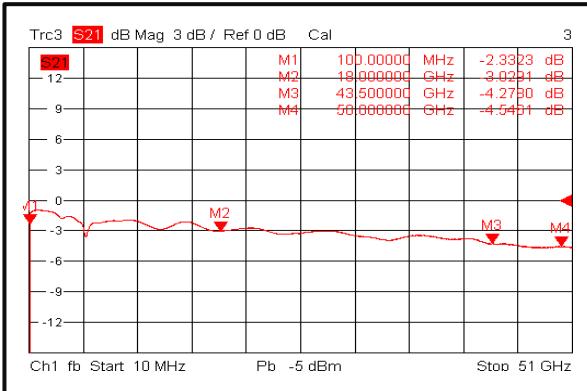
Output VSWR @+25°C



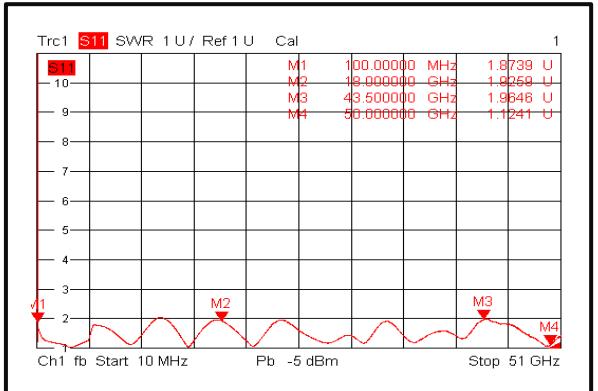
Isolation @+25°C



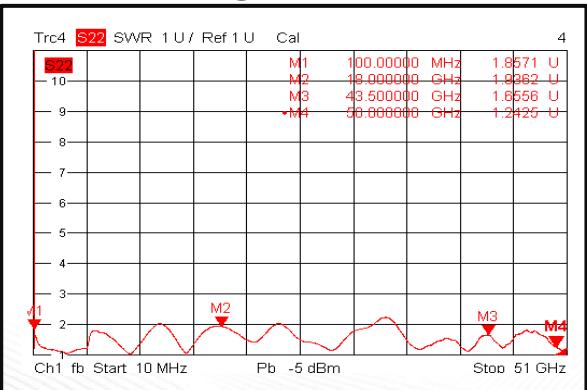
Insertion Loss @-40°C



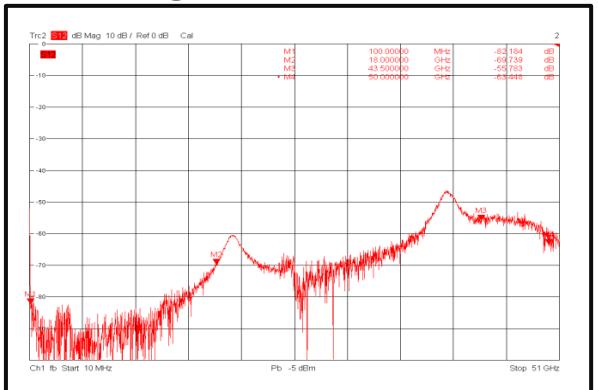
Input VSWR @-40°C



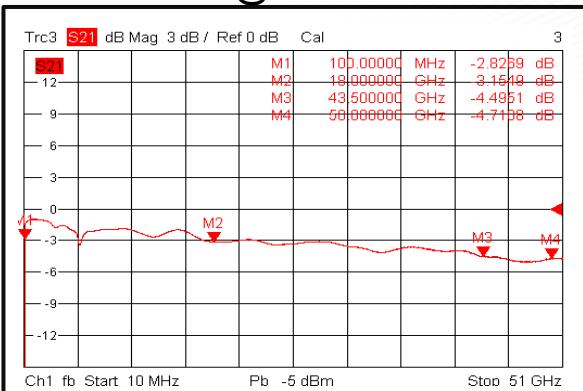
Output VSWR @-40°C



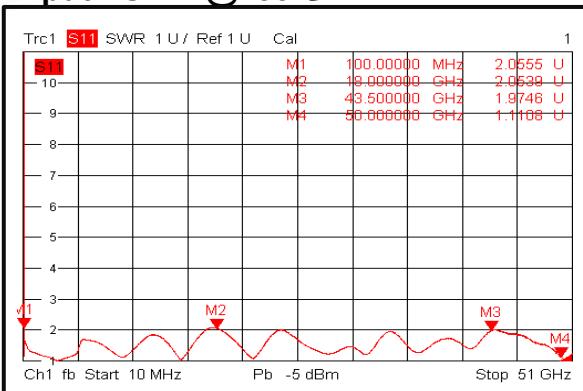
Isolation @-40°C



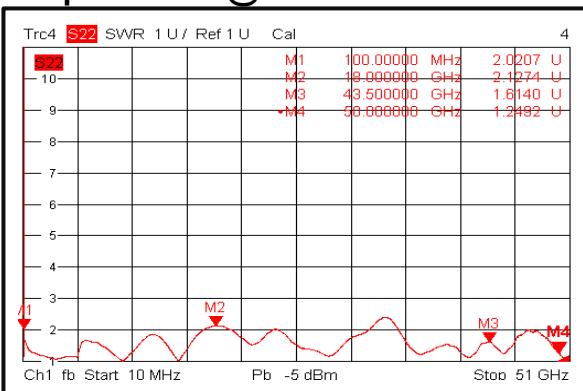
Insertion Loss @+85°C



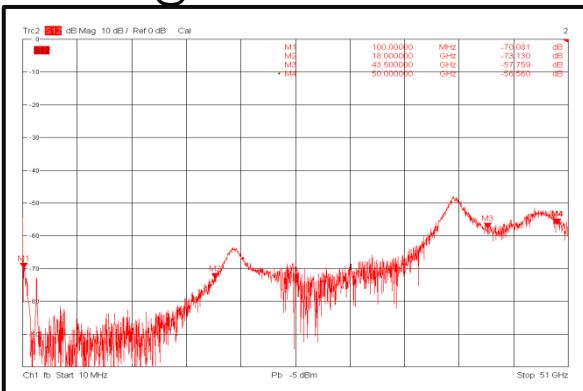
Input VSWR @+85°C



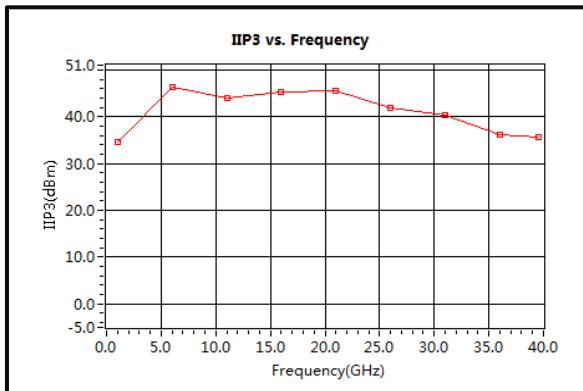
Output VSWR @+85°C



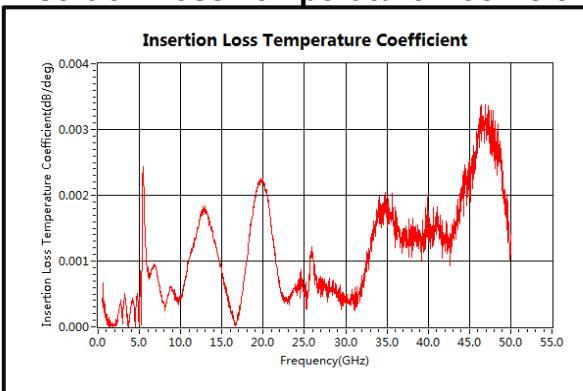
Isolation @+85°C



IIP3



Insertion Loss Temperature Coefficient



Insertion Loss vs. Temperature

