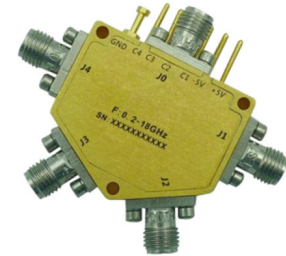




Absorptive Coaxial SP4T Switch 0.2 - 18GHz



Features

- Ultra Wide Band Operation 0.2-18GHz
- 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

| Parameter | Min. | Typ. | Max. | Min. | Typ. | Max. | Min. | Typ. | Max. | Units |
|----------------------------------------|--------------------------------|-------|------|------|-------|------|-------|-------|------|--------|
| Frequency Range | 0.2~6 | | | 6~12 | | | 12~18 | | | GHz |
| Insertion Loss | | 2.5 | 3 | | 3.5 | 4 | | 3.5 | 4.5 | dB |
| Insertion Loss Temperature Coefficient | | 0.003 | | | 0.003 | | | 0.003 | | dB/ °C |
| Isolation | 60 | 75 | | 60 | 70 | | 60 | 65 | | dB |
| Input VSWR | | 1.5 | 1.8 | | 1.6 | 1.8 | | 1.6 | 1.8 | : 1 |
| Output VSWR | | 1.5 | 1.8 | | 1.6 | 1.8 | | 1.6 | 1.8 | : 1 |
| RF Input Power (CW) | | | 30 | | | 30 | | | 30 | dBm |
| Power Dissipation | | 1 | | | 1 | | | 1 | | W |
| 0.1dB Compression Point (P0.1dB) | | 30 | | | 30 | | | 30 | | dBm |
| IIP3 | | 55 | | | 55 | | | 55 | | dBm |
| Switching Speed | 100 | | | | | | | | | ns |
| Weight | 0.71 | | | | | | | | | ounces |
| Impedance | 50 | | | | | | | | | Ω |
| Bias Current (+5V/-5V) | 160/50 | | | | | | | | | mA |
| Input / Output Connectors | SMA-Female | | | | | | | | | |
| Finish | Gold Plated | | | | | | | | | |
| Material | Aluminum | | | | | | | | | |
| Sealing | Hermetically Sealed (optional) | | | | | | | | | |



Absolute Maximum Ratings

| | |
|---------|-----------------|
| Biasing | +5V±10%/-5V±10% |
|---------|-----------------|

Environmental Specifications

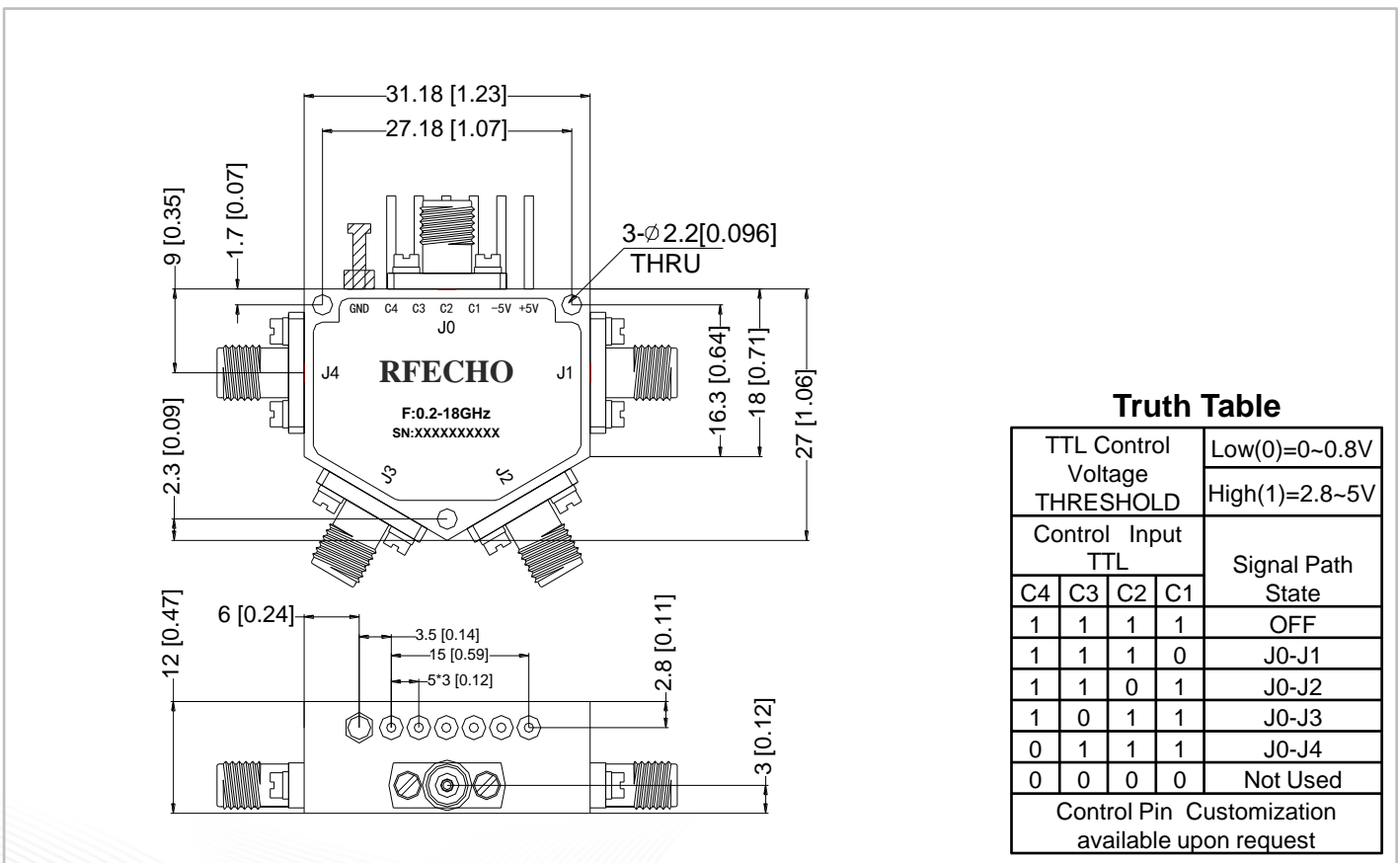
| | |
|-------------------------|----------------------------------------------------------------------------------|
| Operational Temperature | -40°C~+85°C (Case Temperature) |
| Storage Temperature | -50°C~+105°C |
| Altitude | 30,000 ft. (Epoxy Sealed Controlled environment) |
| | 60,000 ft. 1.0psi 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 |

Ordering Information

| Part No. | Description |
|-----------------|----------------------------------|
| DBSA0400201800H | SP4T 0. 2-18GHz PIN Diode Switch |

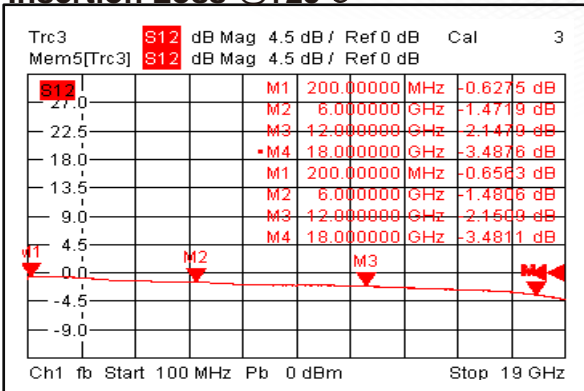
Outline Drawing:

All Dimensions in mm (inches)

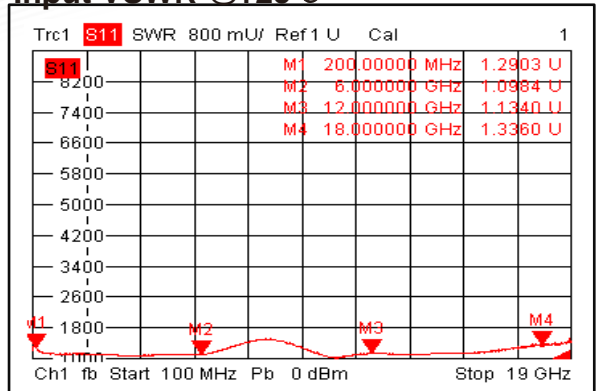




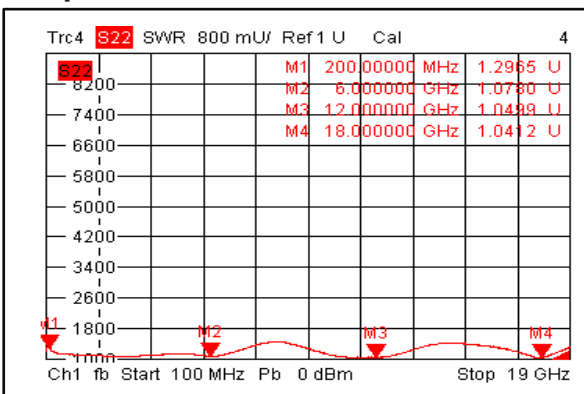
Insertion Loss @+25°C



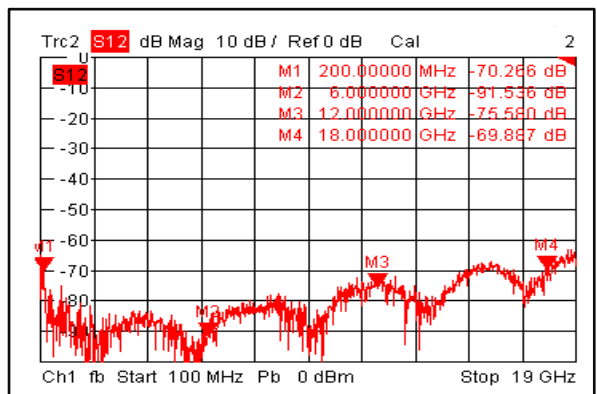
Input VSWR @+25°C



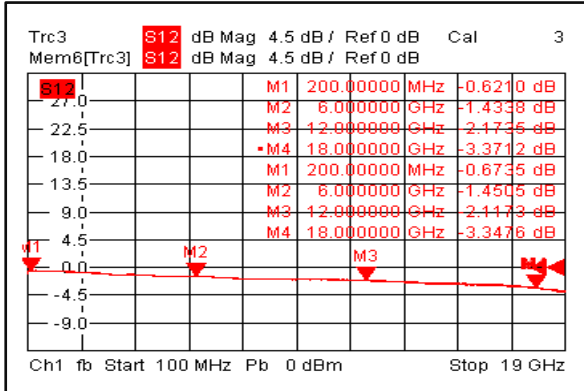
Output VSWR @+25°C



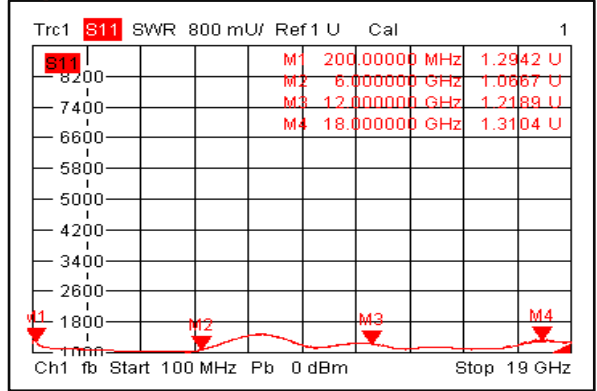
Isolation @+25°C



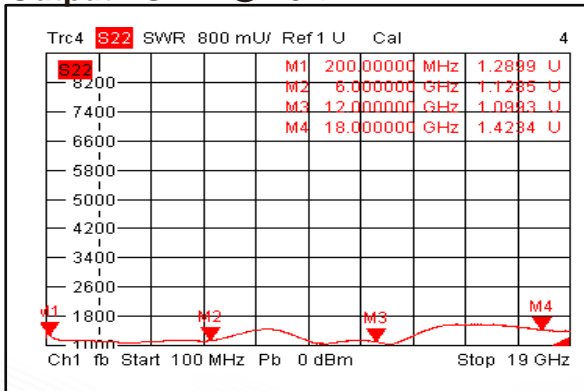
Insertion Loss @-40°C



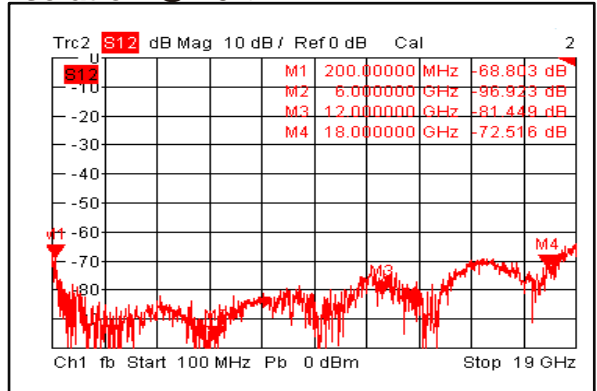
Input VSWR @-40°C



Output VSWR @-40°C

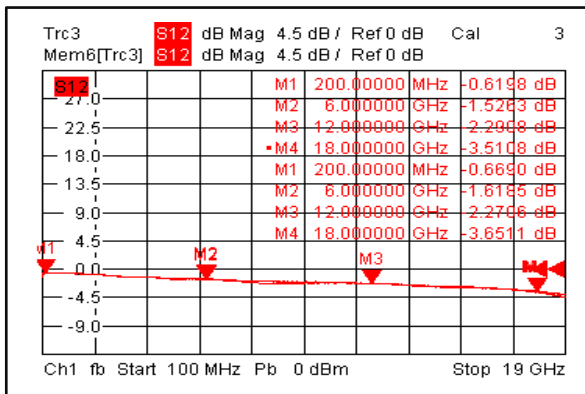


Isolation @-40°C

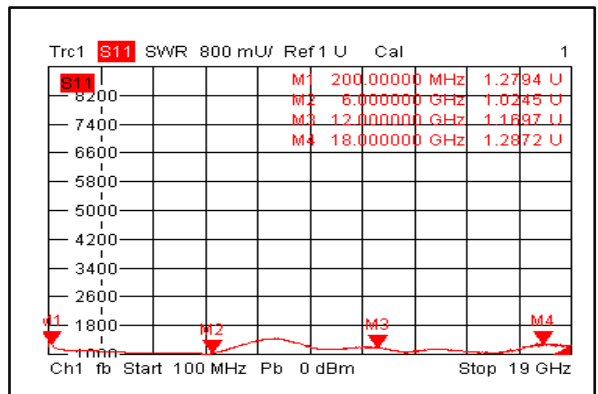




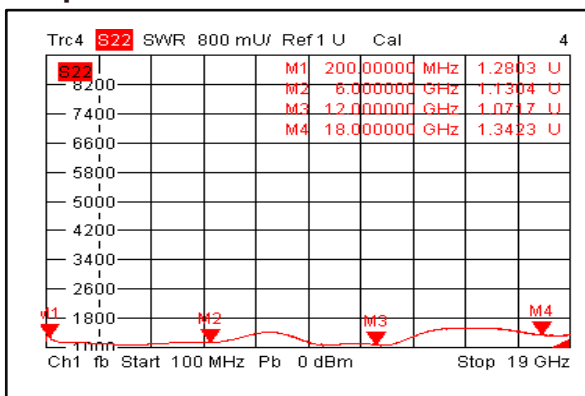
Insertion Loss @+85°C



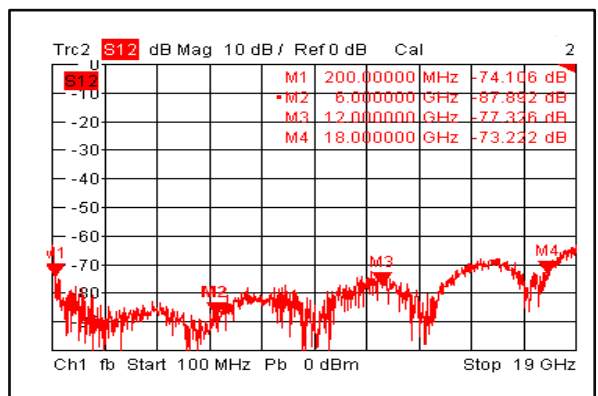
Input VSWR @+85°C



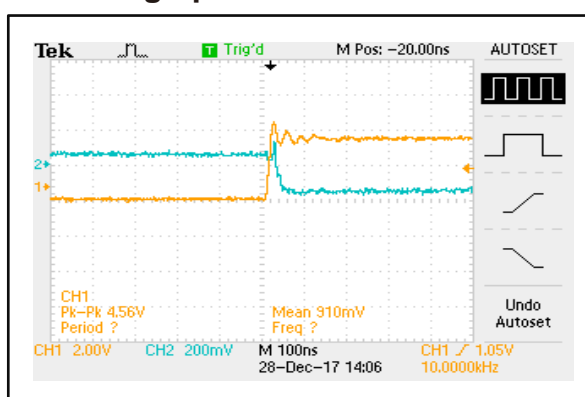
Output VSWR @+85°C



Isolation @+85°C



Switching Speed



Switching Speed

