



Reflective 1-2GHz Coaxial SP2T Switch

Features

- Wide Band Operation 1-2GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation
- High Power Cold Switching
- Customization available upon request



Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT
Fiber Optics

| Parameters | Min | Typ. | Max | Units |
|--|--------------------------------|-------|-----|---------|
| Frequency Range | 1-2 | | | GHz |
| Insertion Loss | | 0.8 | 1.5 | dB |
| Insertion Loss Temperature Coefficient | | 0.003 | | dB/ ° C |
| Isolation | 40 | 42 | | dB |
| Input VSWR | | 1.4 | 1.5 | : 1 |
| Output VSWR | | 1.4 | 1.5 | : 1 |
| Input Power | | | 70 | W |
| Input Power Peak (12% duty cycle,30us pulses) | | | 600 | W |
| DC Power Dissipation (CW) | | 22 | | W |
| 0.1dB Compression Point (P0.1dB) | | 48 | | dBm |
| IIP3 | | 55 | | dBm |
| Switching Speed | | | 1 | us |
| Weight | 7.76 | | | ounces |
| Impedance | 50 | | | Ω |
| Bias Current (+5V) | 200 | | | mA |
| Input /Output Connectors | N-Female/N-Female (Standard) | | | |
| Finish | Gray Painted (IP65) | | | |
| Material | Aluminum | | | |
| Sealing | Hermetically Sealed (Optional) | | | |



Absolute Maximum Ratings

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

Ordering Information

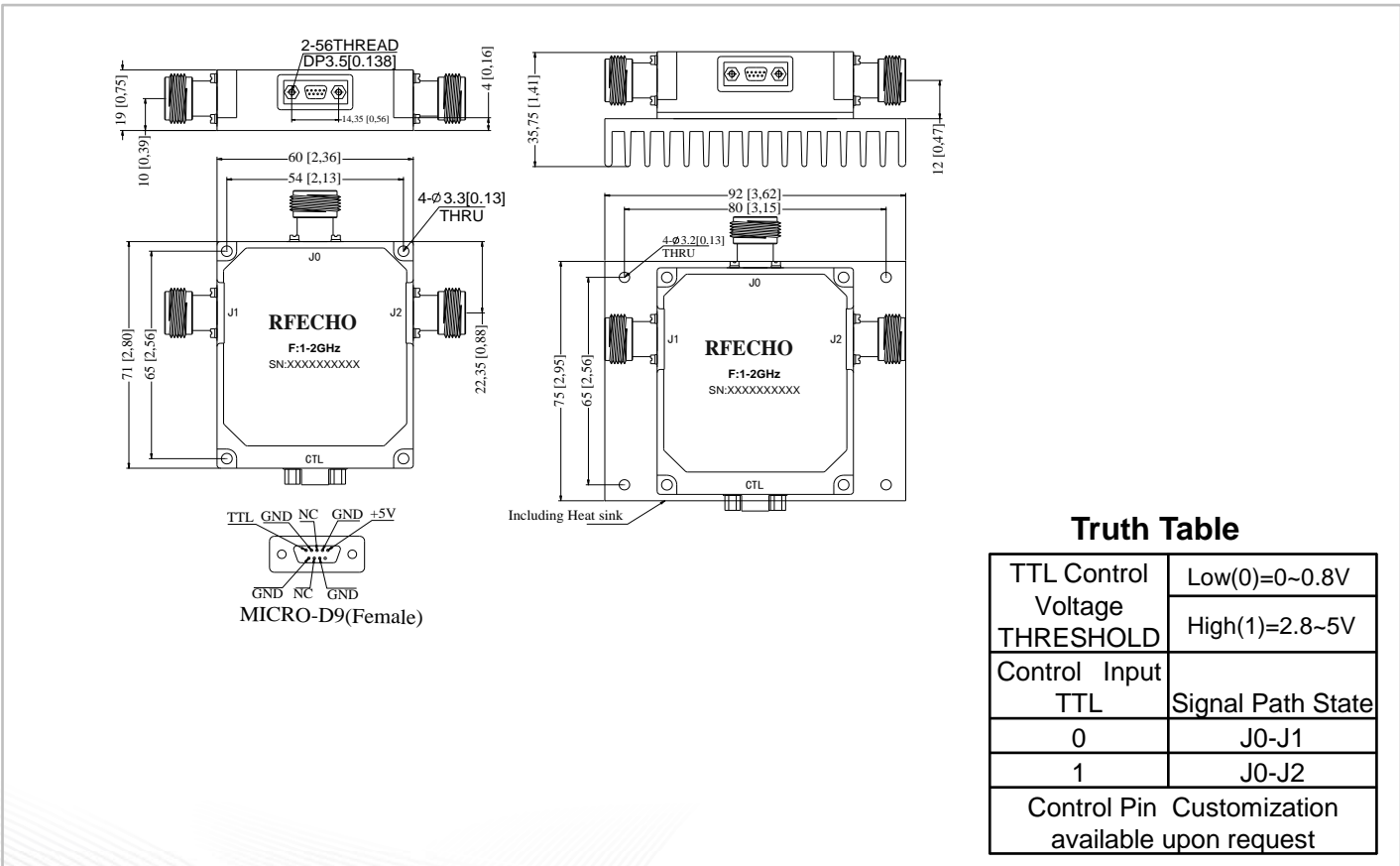
| Part No. | Description |
|-----------------|------------------------------|
| DBSR0201000200B | SP2T 1-2GHz PIN Diode Switch |

Environmental Specifications

| | |
|-------------------------|--|
| Operational Temperature | -40°C~+85°C |
| 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 |

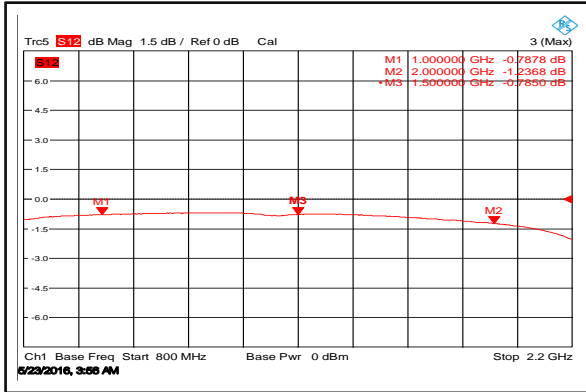
Outline Drawing:

All Dimensions in mm (inches)
Housing Tolerances ±0.2 [0.008]

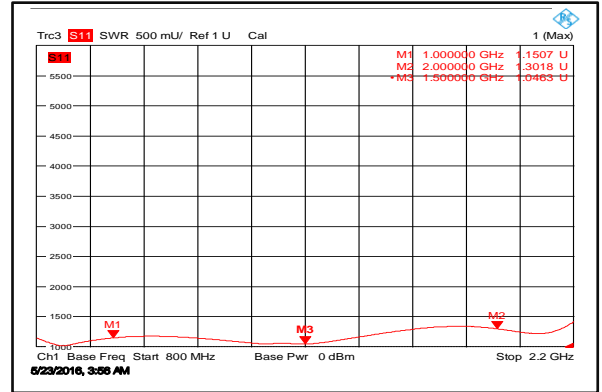




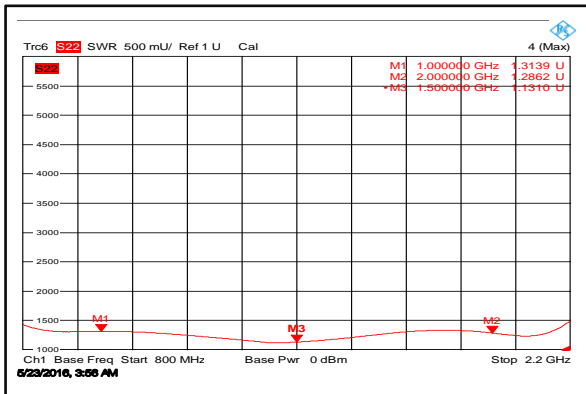
Insertion Loss



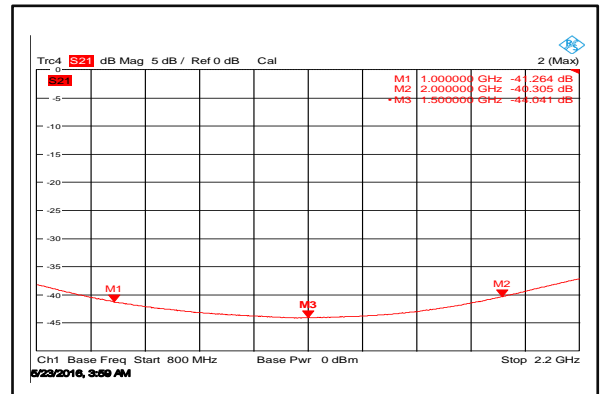
Input VSWR



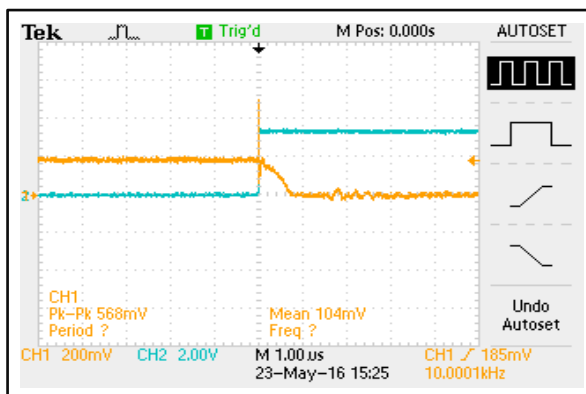
Output VSWR



Isolation



Turn on Switching Speed



Turn off Switching Speed

