



ABSORPTIVE SWITCH

Solid-state, SP8T

Features

- ✓ Ultra Wide Band Operation 0.02-18GHz
- ✓ TTL compatible driver included
- ✓ Fast Switching Speed
- ✓ Low Insertion Loss and High Isolation
- ✓ Customization available upon request

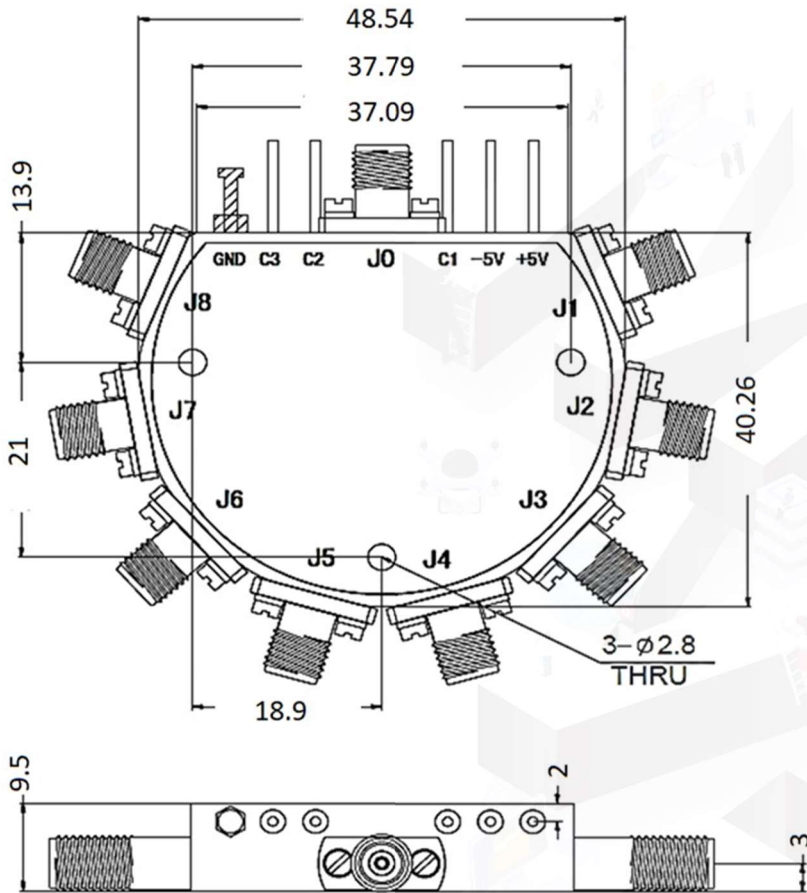
Specification

| RF CHARACTERISTICS | | | |
|------------------------------|--|----------|-----------|
| FREQUENCY RANGE | 0.02-6 GHz | 6-12 GHz | 12-18 GHz |
| VSWR Max. | 1.8 | 1.8 | 2.0 |
| ISOLATION MIN. | 60dB | 75dB | 60dB |
| INSERTION LOSS MAX. | 4.5 dB | 5.5 dB | 6.0 dB |
| I.L. Temperature Coefficient | 0.003dB/ °C | | |
| ELECTRICAL CHARACTERISTICS | | | |
| RF INPUT POWER | 30dBm | | |
| DC POWER DISSIPATION | 1.5W | | |
| IIP3 | 40dBm | | |
| 0.1dB Compression P0.1dB | 30dBm | | |
| SWITCHING SPEED | 250 ns | | |
| BIAS CURRENT (+5V / -5V) | 350 / 50 mA | | |
| MECHANICAL CHARACTERISTICS | | | |
| Input /Output Connector | SMA-Female | | |
| Finishing | Gold Plating | | |
| Material | Aluminum | | |
| Seal | Hermetically Sealed (optional) | | |
| ENVIRONMENT SPECIFICATIONS | | | |
| Design to meet the Spec. | | | |
| OPERATIONAL TEMPERATURE | -40°C~+85°C | | |
| STORAGE TEMPERATURE | -50°C~+105°C | | |
| ALTITUDE | 30,000 ft. (Epoxy Seal Controlled environment) | | |
| (OPTIONAL) | 60,000 ft. 1.0psi min (Hermetically Seal Uncontrolled environment) | | |
| VIBRATION | 25g RMS (15 degree 2KHz) endurance, 1 hour per axis | | |



| | |
|-----------------|---|
| HUMIDITY | 100% RH at 35c, 95% RH at 40°C |
| SHOCK | 20G for 11msec half sine wave, 3 axis both directions |

OUTLINE DRAWING: All Dimensions in mm



| | |
|---|----------------|
| Absolute Max. Ratings Design to meet the Spec. | |
| Biasing | +5V±10%-5V±10% |
| TTL Control Voltage | 0-0.8V/2.8-5V |

| TRUTH TABLE | | | |
|-------------|----|--------|-------------------|
| Control | | Input | Signal Path State |
| C3 | C2 | TTL C1 | |
| 0 | 0 | 0 | J0-J1 |
| 0 | 0 | 1 | J0-J2 |
| 0 | 1 | 0 | J0-J3 |
| 0 | 1 | 1 | J0-J4 |
| 1 | 0 | 0 | J0-J5 |
| 1 | 0 | 1 | J0-J6 |
| 1 | 1 | 0 | J0-J7 |
| 1 | 1 | 1 | J0-J8 |

Control Pin
Customization available upon request

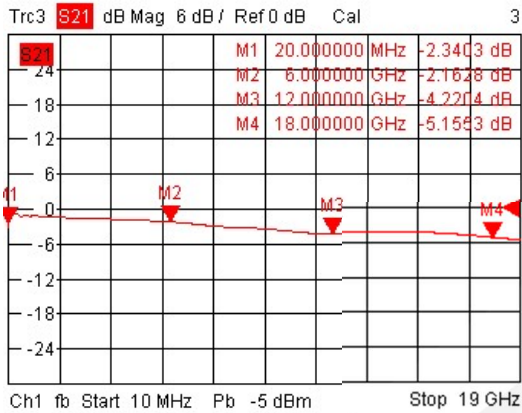
- NOTES:
1. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
 2. CUSTOMER OUTLINE DRAWING FOR REFERENCE ONLY



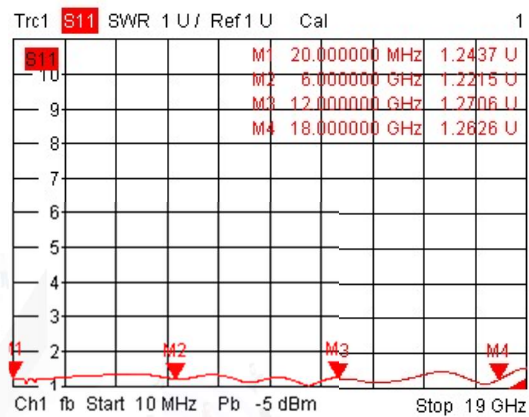


Typical Test Result

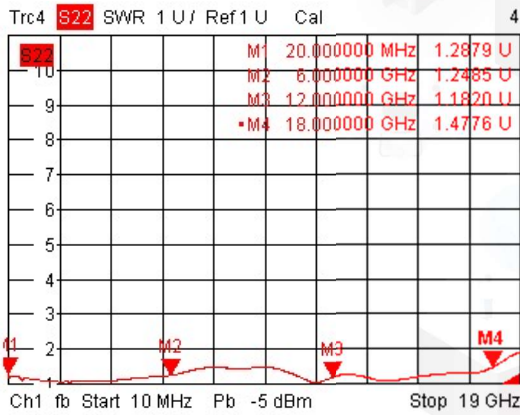
Insertion Loss @ +25°C



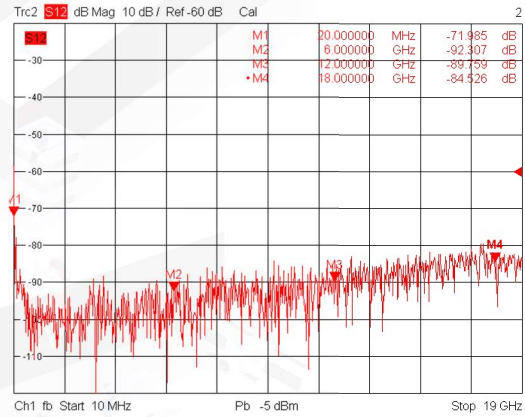
Input VSWR @ +25°C



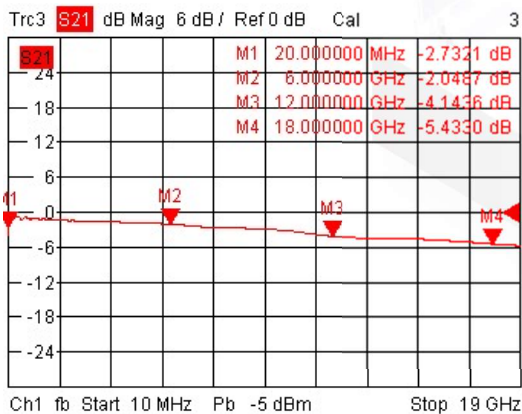
Output VSWR @ +25°C



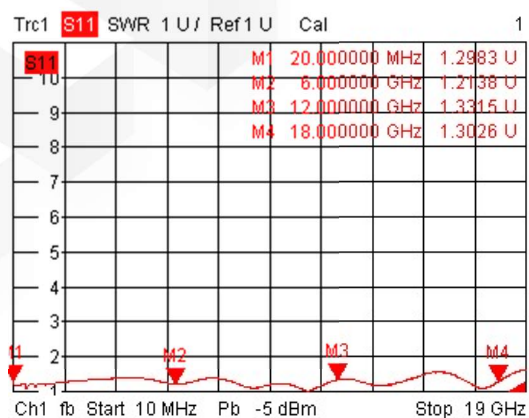
Isolation @ +25°C



Insertion Loss @ -40°C

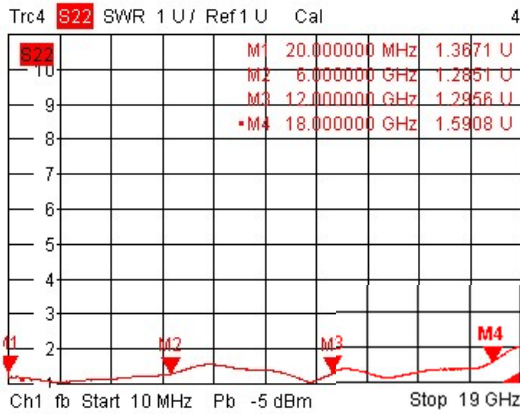


Input VSWR @ -40°C

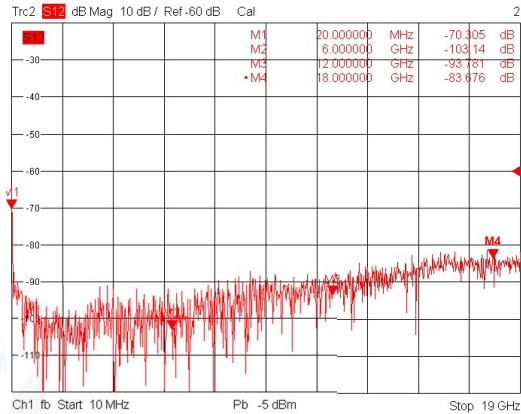




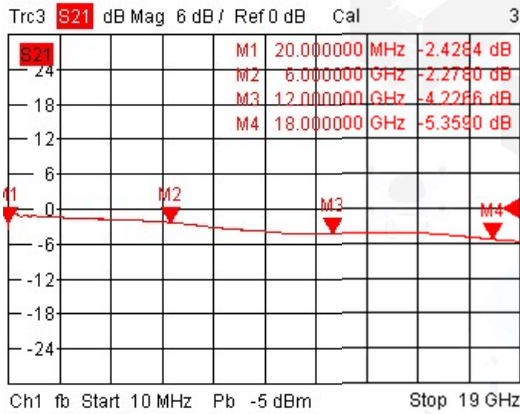
Output VSWR @ -40°C



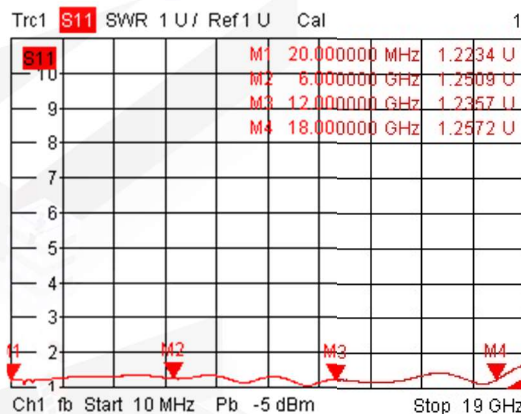
Isolation @ -40°C



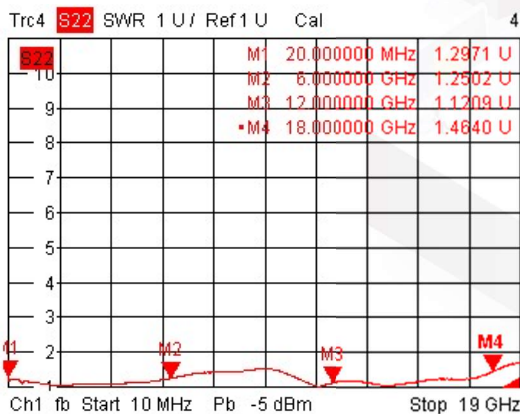
Insertion Loss @ +85°C



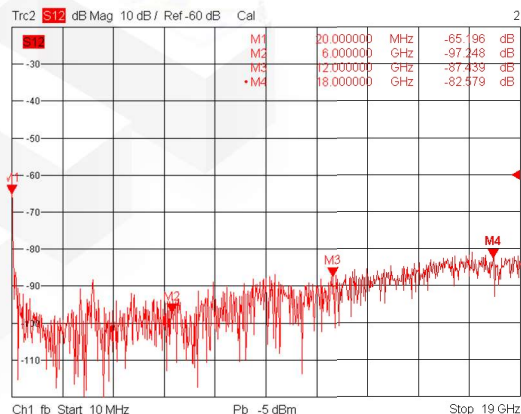
Input VSWR @ +85°C



Output VSWR @ +85°C



Isolation @ +85°C



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