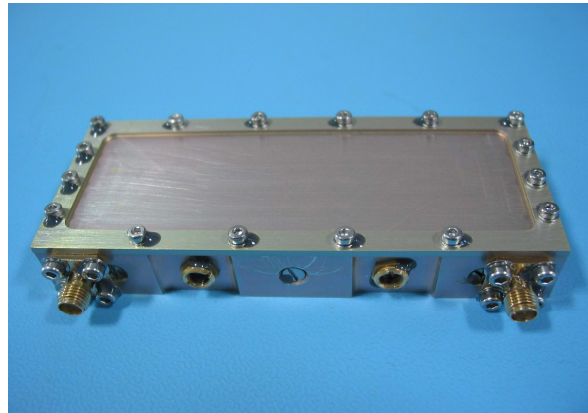


# S-Band Receive Filter

## Applications

- LEO/MEO S-Band Filter
- Earth Observation Missions
- Space Science Missions



S-Band Receive Filter

## Features

- Extensive flight heritage
- 80 MHz operating frequency band
- > 60 dB Rejection across 2200 – 2290 MHz band
- < 1.5 dB insertion loss at band centre

## Interfaces

- 50 Ohm interface (Female SMA)

## Key Specifications

- Operating frequency band: 2025 – 2105 MHz
- Dimensions: 46 x 98 x 19 mm
- Mass: 90 g

## Heritage

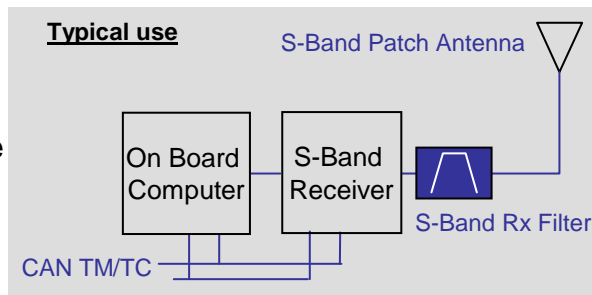
- 28 S-Band Receive filters in orbit (26 LEO, 2 MEO)

## Options

- Adjustable centre frequency

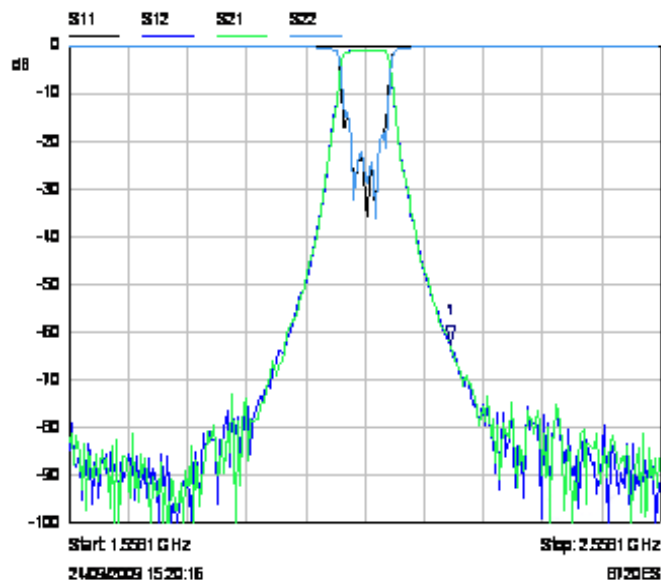
## SSTL Associated Products

- S-Band Receiver
- S-Band Patch Antenna



## Typical Performance Characteristics

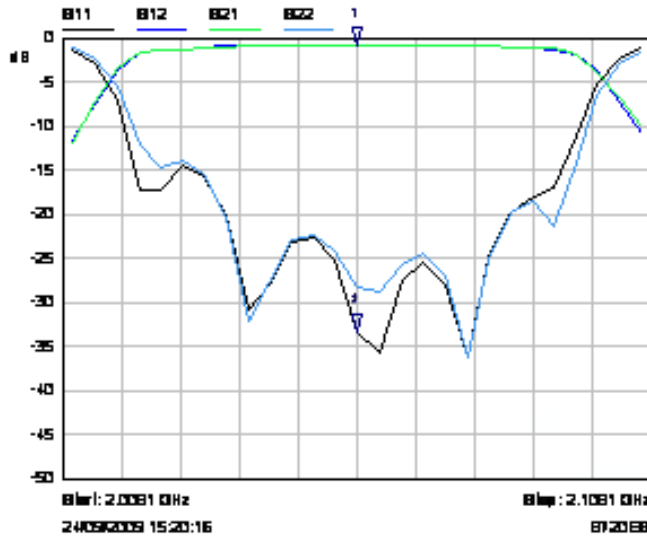
All performance characteristics at 23°C



Mkr	Trace	X-Axis	Value	Notes
1	S21	2.032 GHz	-62.60 dB	TX BAND EDGE

S-Band Receive Filter Rejection Performance

# S-Band Receive Filter



Mr	Trace	X-Axis	Value	Notes
1	B21	2.0581 GHz	-0.83 dB	CENTRE FREQUENCY
2	B11	2.0581 GHz	-33.49 dB	CENTRE FREQUENCY

S-Band Receive Filter Band Centre Performance

SSTL is ISO9001:2008 certified

- Manufacture to:
  - ECSS Q-ST-70-08C
  - ECSS Q-ST-70-38C
  - All work overseen by ESA trained assembly staff

Standard Delivery Service Includes

- Compliance Testing
- Test Plan
- Test Results
- Export License and Shipping
- Thermal Vacuum Testing available
- Unit can be supplied prior to environmental testing

Operating Frequency Band	2025 - 2105 MHz
VSWR Band Centre	< 1.5:1
Insertion Loss (Band Centre)	< 1.5 dB
TX Band Rejection	> 60 dB
Passband Ripple	< 1.0 dB
Dimensions	46 x 98 x 19 mm
Mass	90 g
Operating Temperature	-20 to +50 °C operating -30 to +60 °C non-operating
Terminal Impedance	50 Ω

## Surrey Satellite Technology Limited

SSTL has launched over 30 satellites gaining almost 200 years in-orbit experience. SSTL draws on its world-class expertise in both small satellite platform technology and high and medium resolution optical instruments. SSTL provides complete turn-key system solutions; spacecraft, ground station, launch, operations and image processing.

SSTL is unique in the space industry; able to design, manufacture and integrate multiple satellites in-house.

Changing the economics of space  
[www.sstl.co.uk](http://www.sstl.co.uk)