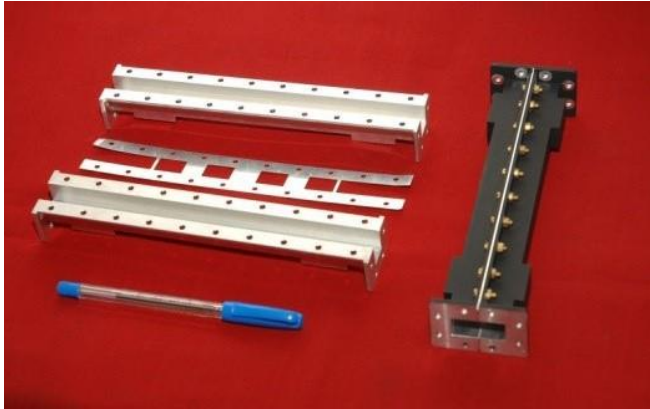


# Plane Filter

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Low loss, high Q band pass filter with high power handling capability designed for data transmission applications in LEO satellites.



*E-plane filter at X-band*

## Specifications:

- Waveguide filter with high Q.
- Low insertion loss.
- Moderate bandwidths (1 to 7%).
- Easy to change centre frequency and bandwidth.
- Handles RF powers beyond 2kW.
- Simple in construction.
- Mass production suitability.

## Major Specifications:

Centre frequency: 8.2 GHz.

Bandwidth : 160 MHz.

Insertion loss : 0.5 dB max.

Return loss : 17 dB min.

Group delay : 6 n sec max.

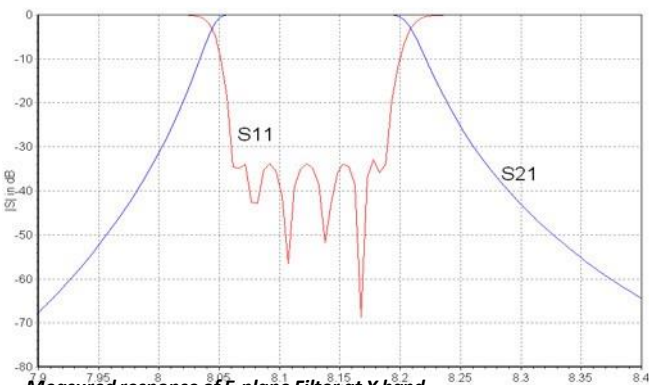
Rejection : 90 dBc for lower frequency bands.

Power handling : 200 W CW at vacuum conditions.

RF interface : WR112 waveguide flange.

Size : 50 x 35 x 200 mm<sup>3</sup>.

Mass : 200 grams.



*Measured response of E-plane Filter at X band*



*E-plane filter at X-band*

## Technology Transfer from ISRO

ISRO is willing to offer the knowhow of this technology to suitable entrepreneurs / industries in India. Capable manufacturing industries interested in acquiring this knowhow may write with details of their present activities, requirements and plans for implementation, infrastructure and technical expertise available with them, their own market assessment, if any, and plans for diversification to the address given below: