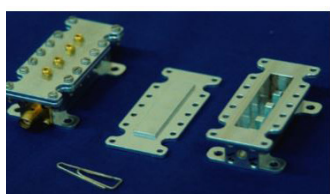


Evanescent Mode Filters

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Low loss microwave band pass filter designed for X-Band Data transmitter to allow required band of frequencies and rejecting all other frequencies.



E-Plane Filter at X-band



Measured Response of
X band filter

Salient Features

- ✦ TEM mode operation in cavity.
- ✦ Narrow bandwidth.
- ✦ Symmetric skirt response.
- ✦ High rejection bandwidth.
- ✦ Coaxial interface.
- ✦ Compact and light weight.
- ✦ Mechanically robust.
- ✦ Mass production suitability.

Major Specifications

- | | |
|--------------------|--------------------------------|
| ✦ Centre frequency | : 8.2 GHz |
| ✦ Bandwidth | : 360 MHz |
| ✦ Insertion loss | : 0.35 dB max |
| ✦ Return loss | : 17 dB min |
| ✦ Group delay | : 4 n sec max |
| ✦ Rejection | : 90 dBc up to $2f_0$ |
| ✦ Power handling | : 20 W CW at vacuum conditions |
| ✦ RF interface | : SMA jack |
| ✦ Size | : 15 x 15 x 40 mm ³ |
| ✦ Mass | : 50 grams |

Technology Transfer

URSC-ISRO offers to transfer this technology of Evanescent mode filters to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

Technology Transfer & Industry Coordination Division (TTID),
Programme Planning and Evaluation Group (PPEG),

📍 U R Rao Satellite Centre (URSC), ISRO, HAL Airport Road,
Vimanapura Post, Bangalore – 560 017.

✉ Email-id: tt-icd@ursc.gov.in

🌐 <https://www.ursc.gov.in/industry/index.jsp>