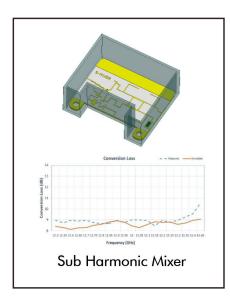


# U R Rao Satellite Centre Indian Space Research Organisation



### Sub harmonic Mixer at Ku Band

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed a Sub harmonic Mixer to eliminate the requirement of high frequency generation chain in existing Ku TTC Rx without compromising the performance of the receiver.



#### **Salient Features**

- → The mixer requires LO signal in C-Band for down converting Ku-Band frequency to UHF frequency.
- → The size of the module is 30mm x15mm.

## **Major Specifications**

★ RF Signal Frequency : 12.2 GHz-13.25 GHz

+ 1dB Compression Point : -3 dBm

→ LO Oscillator frequency : 5.8 GHz - 6.4 GHz

+ LO Signal Level : 3±1 dBm

→ Output Signal Frequency (IF) : ~541-556 MHz

+ Conversion Loss : 9 dB (typical)

+ LO-RF Isolation : Better than 40 dB

## **Technology Transfer**

URSC/ISRO offers to transfer this technology of Sub harmonic Mixer at Ku Band 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.

