

# अंतरिक्ष उपयोग केन्द्र SPACE APPLICATIONS CENTRE

### V-BAND LOW NOISE AMPLIFIER

Space Applications Centre (SAC) of Indian Space Research Organisation (ISRO) has developed a low noise amplifier designed at V band. It operates at 50-60GHz and gives a gain of 7-10dB. The typical noise figure is less than 5dB. It is also a medium power amplifier with 14 dB output power at 1dB gain compression. The amplifier has waveguide WR-15 interface at the input and output.

## Typical Applications

- EW Receivers
- Weather & Military UWB radar
- Ultra wideband comm. networks
- Frequency: 50-60GHz
- Noise Figure: 5 dB
- Gain 8.5dB (higher gain option available)
- Output Power at (@P1dB) 14dBm
- DC power consumption: 80mA, 3V
- Input / Output : Waveguide WR15

### Salient Features

Frequency (GHz)	50-60
Gain (dB)	8.5 ± 1.5 dB
Noise Figure (dB)	5
P1dB (dBm)	14
DC Bias	3V, 80mA

# Technology Transfer

SAC/ISRO, offers to transfer this technology of the V-band Low Noise Amplifier developed by SAC to industries in India with adequate experience and facilities. Enterprises interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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