



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 register and submit their proposal to IN-SPACe, Ahmedabad at www.inspace.gov.in

For more details, Contact:

Technology Transfer & Industry Interface Division (TTID), PPEG
 Space Applications Centre (SAC), ISRO
 Ambawadi Vistar, Jodhpur Tekra, Ahmedabad - 380 015
 Email: ttid@sac.isro.gov.in
https://www.sac.gov.in/SAC_Industry_Portal

