

AK00-02A

12~18GHz Gain 26dB LNA module

General Description

The AK00-02A is a general LNA module that have high linearity & gain performance. The module features a best gain, noise figure, power and excellent current consumption. It stages ensure quick time to market for custom specification.



Applications

- Scientific measurement system
- EMC/EMI test
- Ku-band system gain block

Electrical Specification

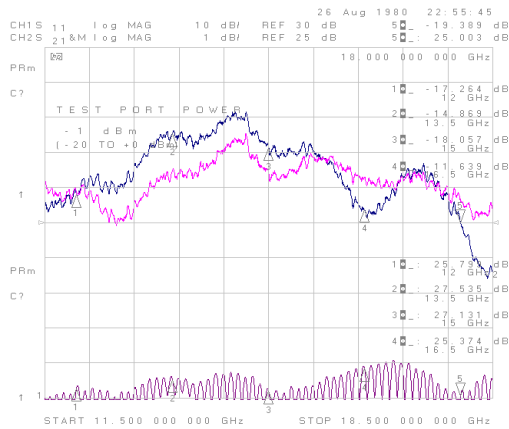
Parameter	Specification	Comment
Frequency	12 ~ 18GHz	
Output Power	24dBm	P1dB
Gain Flatness	± 2 dB	P1dB
Gain	26dB	
Input Return Loss	-10 dB	
Noise Figure	3dB	
Current Consumption	0.33A	Typ. @P1dB
IIP3	33dBm	IP3=P1dB/Tone +IMD/2

Power Connector, Feed Through, 4300-005LF

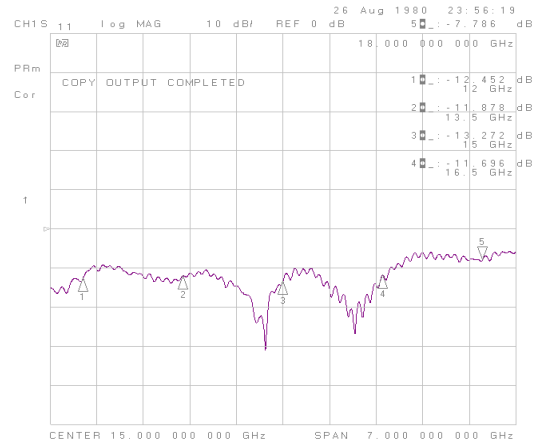
Pin	Specification	Comment
1	VDD	+15V _{DC}

Performance Plot

Plot 1 - Small Signal and P_{SAT}
 Top Curve: Small Signal Gain @ $P_{IN} = -20\text{dBm}$
 Middle Curve: P_{1dB} @ $P_{IN} = -1\text{dBm}$
 Reference: 25dB, 1dB/div.
 Bottom Curve: Input Return Loss
 Reference: 30dB, 10dB/div.



Plot 2 - Output Return Loss
 Curve: Output Return Loss
 Reference: 0dB, 10dB/div



Plot 3 - Noise Figure and Gain
 Top Curve: Noise Figure
 Reference: 3dB, 0.5dB/div
 Bottom Curve: Gain
 Reference: 25dB, 2dB/div

