

X band LNA for radioastronomy & satellite communications

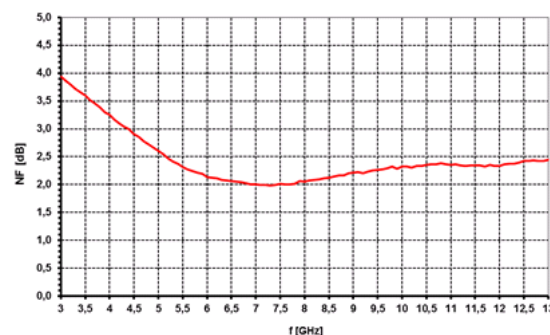


USING CUTTING-EDGE TECHNOLOGY, THE NEW LNA/LNB FAMILY OFFERS OUTSTANDING PERFORMANCE IN OUTDOOR OPERATIONS FOR RADIOASTRONOMY APPLICATIONS



RF performance

Operating frequency range	4-12 GHz
Input VSWR	<1.4:1
Output VSWR	<1.3:1
Amplifier noise figure	*see figure
Amplifier gain	29-30dB
Amplifier gain slope	0dB
Gain flatness	< 1dB (peak to peak) full band < 0.5dB (peak to peak) for any 2GHz bandwidth
Gain compression	$P_{out_{1dB}} > 14dBm$
Current consumption	$\leq 135mA @ 12V$
Gain variation with temperature	$\leq 0.03dB/^{\circ}C$
Phase variation with temperature	$\leq 0.5degrees/^{\circ}C$
Phase variation with frequency	$\leq 1degree/10MHz$
Stability	Unconditionally stable
Power dissipation	$\leq 225mA$



*Typical noise figure performance

Mechanical & interfaces

RF connector type	50 ohms SMA (female or male)
Bias connector type	Solder pin and ground lug attached to the chassis
Dimensions (L x W x H)	33.2 mm x 34.6 mm x 9.9 mm RF In and Out connectors located in-line at the centre of the housing
Weight	32 g

Environmental

Storage temperature	-30°C to 60°C
Operating temperature	-20°C to 50°C
Biasing requirement	8-16V
EMC protection	Internal linear DC regulator, reverse voltage protection and DC filter feed-through

Key Features

- * Compact package
- * Broad Band
- * Low noise figure