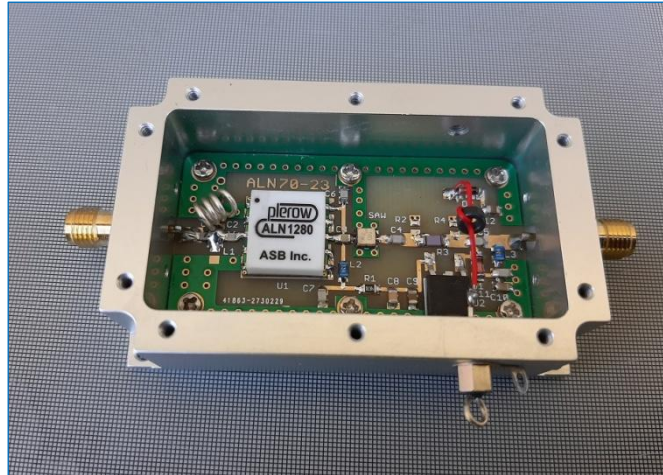


Mechanics & Electronics Inc.

Tropo Preamplifiers

ALN-23W 23cm Tropo Preamplifier



Introduction

The ALN-23W 23cm a 2 stage Tropo Preamplifier high dynamics, selective and low-noise preamplifier for 1296-1300 MHz.

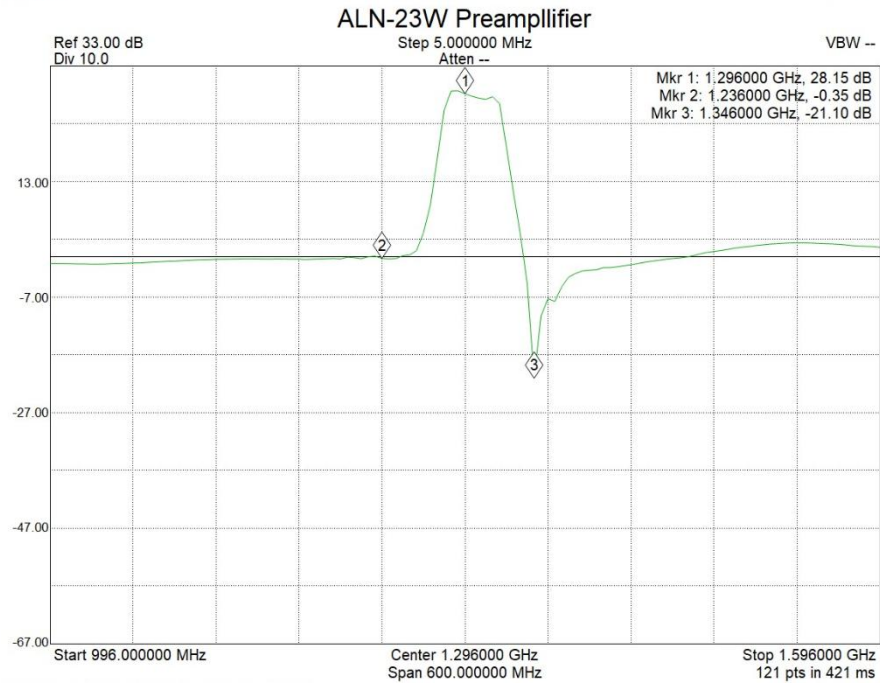
We offer it for Tropo operation. The built in SAW filter gives clean signal and selectivity.

The preamplifier built in a stable ALU box furnished with SMA female connectors. The small dimension is optimal to use it near of your antennas in separate box.

Technical data	ALN-23W
Frequency range:	1290-1300 MHz
Noise figure @ 22°C	Typ < 0.5dB
Noise figure @ -18C	Typ < 0.35 dB
Gain S21, typ.:	28 dB
Input return loss	>20 dB
Output return loss	>10 dB
OIP3:	>+32dBm
IIP3:	typ. +4 dBm
Device:	ALN1280
Max. Input level:	+20dBm
Operating voltage:	+10...+15V
Power consumption:	100mA
Dimensions:	85x50x20mm (w.conn)
Weight:	75g
RF connectors:	2x SMA female



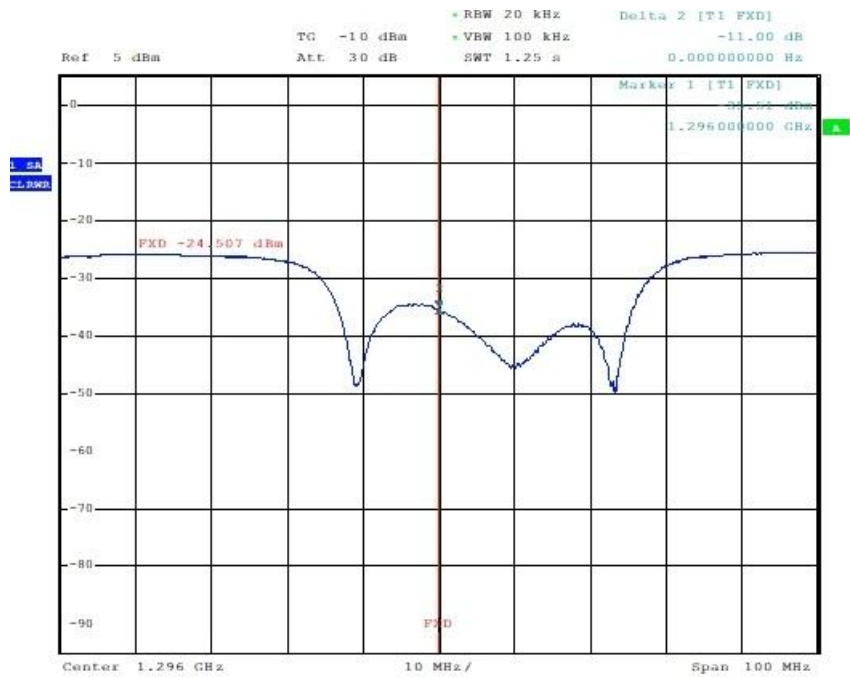
ALN-23W NF Measurements @22°C



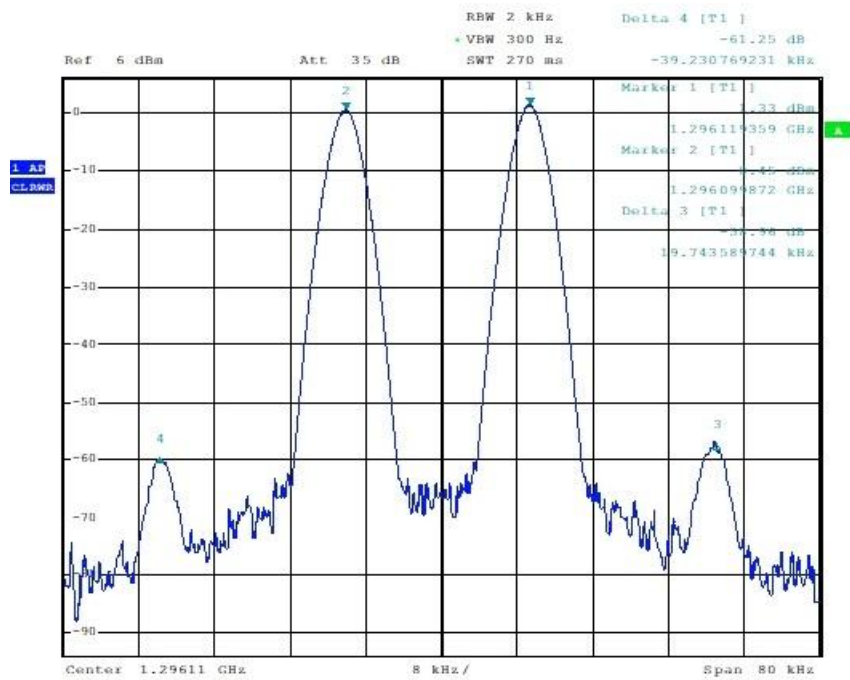
ALN-23W 500MHz BW



ALN-23W Input Return Loss.



ALN-23W Output Return Loss



OIP3 +32.23dBm

Direct	NOISE & GAIN				CALIBRATED
RBW:	1 MHz	RF Atten.	0 dB	2nd Stage Corr.	On
Average:	1	Auto Ref Level	On	Image Rejection	...
Current Value					
RF:	1.29 GHz	ENR	6.2 dB	NF.	0.35 dB
LO:	...	Loss In	0 dB	Noise Temp.	24.62 K
IF:	...	Loss Out	0 dB	Gain	31.23 dB
Frequency List Results					
RF		NF		Noise Temp	
1.29 GHz		0.35 dB		24.62 K	
1.30 GHz		0.36 dB		25.25 K	

NF Measurements on -18°C