

Mechanics & Electronics Inc.

EME Preamplifiers

ME-2 2m EME Preamplifier



Introduction

The ME-2 2m EME Preamplifier is a high-dynamics, selective, and low-noise preamplifier for 144 MHz.

We offer it for EME operation. The built-in SAW filter provides a clean signal and good selectivity.

The preamplifier is built into a stable ALU box furnished with SMA female connectors. The small dimensions are optimal for use near your antennas in a separate box.

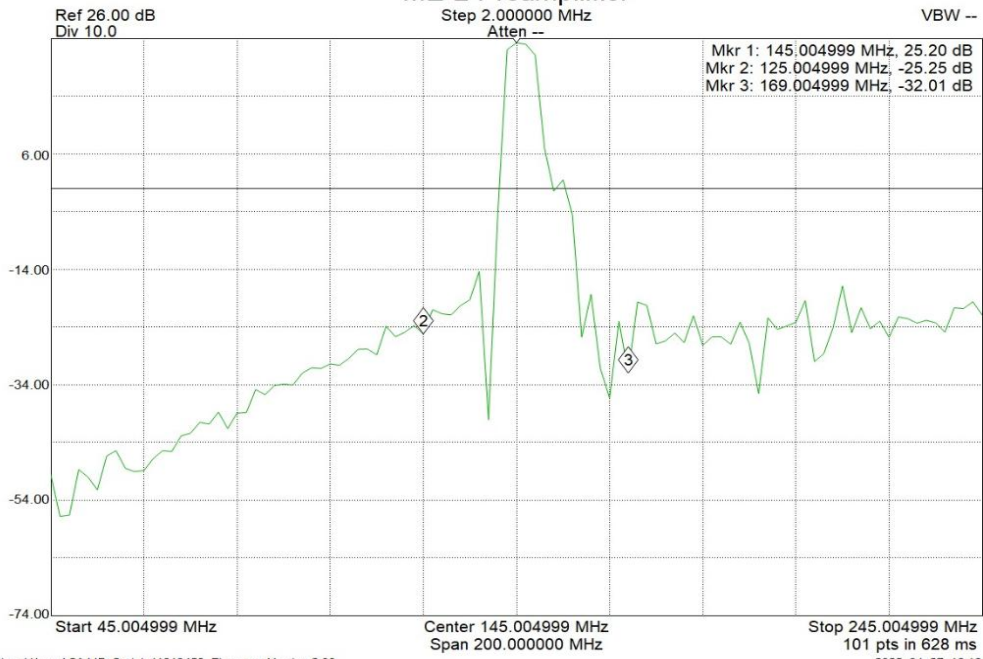
Technical data	ME-2
Frequency range:	144-148MHz
Noise figure @ 22°C	Typ < 0.23 dB
Noise figure @ -18C	Typ < 0.13 dB
Gain S21, typ.:	25 dB
Input return loss	>+7.78 dB
Output return loss	>+22.3 dB
OIP3:	>+28dBm
IIP3:	Typ. + 3dBm
Device:	SAV-541
Max. Input level:	+19dBm
Operating voltage:	+10...+15V
Power consumption:	68mA
Dimensions:	85x50x20mm (w.conn)
Weight:	75g
RF connectors:	2x SMA female

ME-2 Noise Figure measurements

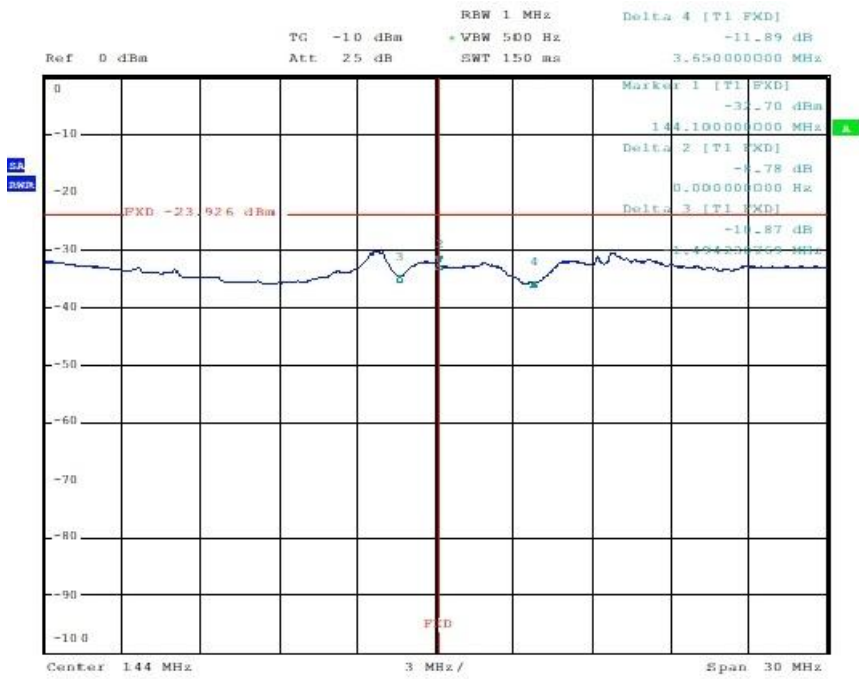
Direct		NOISE & GAIN				CALIBRATED
RBW:	1 MHz	RF Atten.	0 dB	2nd Stage Corr.	On	
Average:	1	Auto RefLevel	On	Image Rejection	...	
Current Value						
RF:	144 MHz	ENR	6.4 dB	NF:	0.22 dB	
LO:	...	Loss In	0 dB	Noise Temp.	14.8 K	
IF:	...	Loss Out	0 dB	Gain	25.34 dB	
Frequency List Results						
RF	NF	Noise Temp	Gain			
144.00 MHz	0.22 dB	14.80 K	25.34 dB			
144.50 MHz	0.24 dB	16.30 K	26.19 dB			
145.00 MHz	0.16 dB	11.20 K	26.24 dB			
145.50 MHz	0.21 dB	14.06 K	25.86 dB			
146.00 MHz	0.19 dB	12.80 K	26.02 dB			
146.50 MHz	0.23 dB	16.09 K	25.83 dB			
147.00 MHz	0.21 dB	14.16 K	25.81 dB			
147.50 MHz	0.19 dB	12.72 K	25.09 dB			
148.00 MHz	0.23 dB	16.01 K	24.98 dB			

ME-2 NF Measurements @ 22°C

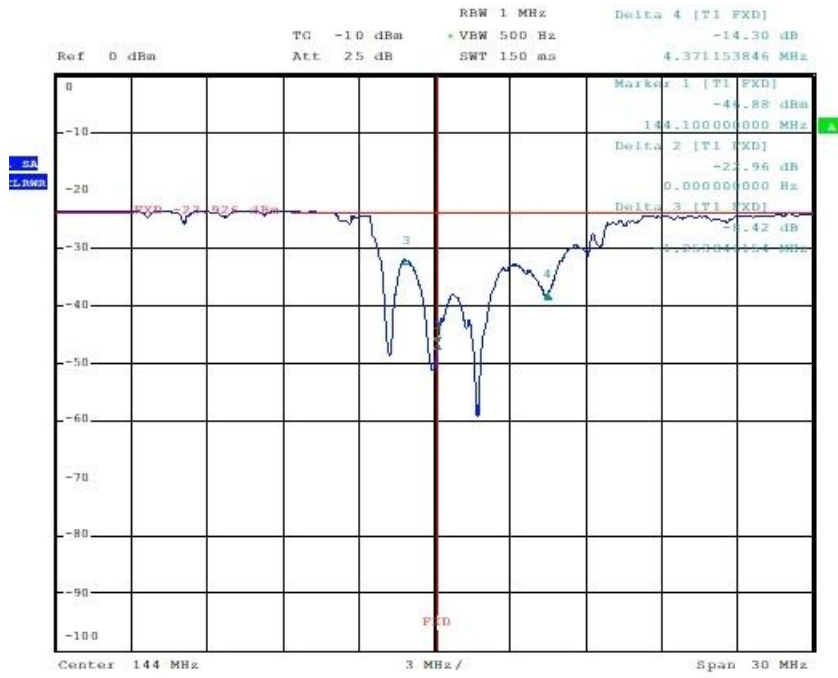
ME-2 Preamplifier



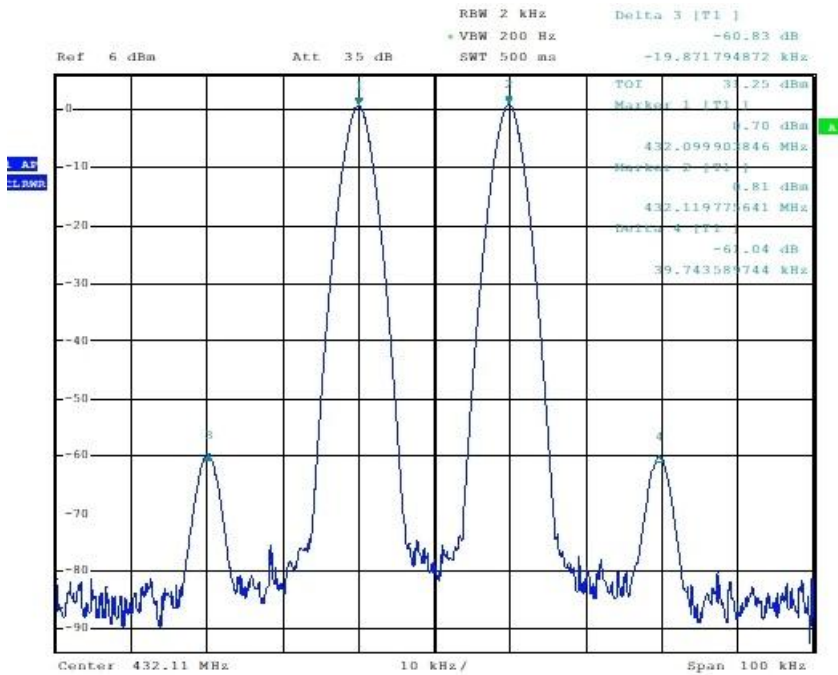
ME-2 200MHz BW.



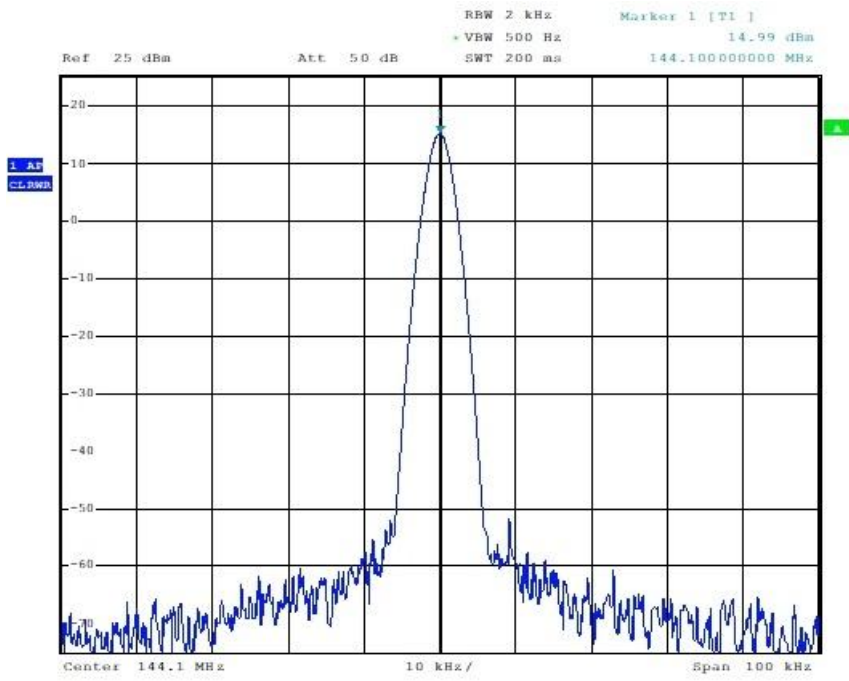
ME-2 Input Return Loss.



ME-2 output return Loss.



OIP3 +28dBm



1 dB Compression point.