

Two Stage Low Noise Amplifier 100-6000MHz

AM1006000-2ST is indoor wideband low noise amplifier intended for precision measurements of RF-signals up to 6GHz. Thanks to very low noise AM1006000-2ST helps to receive weak signals in wide frequency band.

Features:

- High gain
- Low noise
- Wideband
- Flat response
- Compact and reliable
- Wide voltage range

Applications:

- Radio-monitoring
- Small signals receiving
- IF-systems
- Cable loss compensation

RF characteristics*

Frequency range	100-6000											MHz
IN/OUT impedance	50/50											Ohm
	0.03	0.05	0.1	1	2	3	4	5	6	7	8	GHz
Gain	18.0	22.0	24.0	25.5	24.5	22.5	22.0	21.0	19.0	16.5	14.0	dB
Noise fig.	-	-	4.4	1.7	1.7	1.7	1.6	1.7	1.8	2.8	3.5	dB
Return loss IN	-	-	>7	>4	>5	>7	>10	>10	>5	-	-	dB
Return loss OUT	-	-	>10	>10	>10	>8	>8	>10	>10	-	-	dB
Isolation	-	-	>45	>45	>45	>45	>43	>43	>43	-	-	dB
Out 1dB	-	-	19	19	19	19	20	20	20	-	-	dBm
Out IP3 ($\Delta f=1\text{MHz}$)	-	-	33	33	33	32	32	32	32	-	-	dBm

* Measured at temperature $T=+25^{\circ}\text{C}$

DC and mechanical characteristics

Device current	90	mA
Device voltage (DC)	+5.5...+17	V
RF IN/OUT Connector	N female/ N female	
DC connector	Soldering terminals	
Enclosure type	Indoor**, aluminium	
Dimensions	122x58x30	mm

** In case of special need, outdoor type enclosure can be ordered also. Ask Rantelon for more details.

Absolute maximum ratings

Device voltage	+17	V
CW RF input power	+3	dBm
Temperature	-40...+85	$^{\circ}\text{C}$

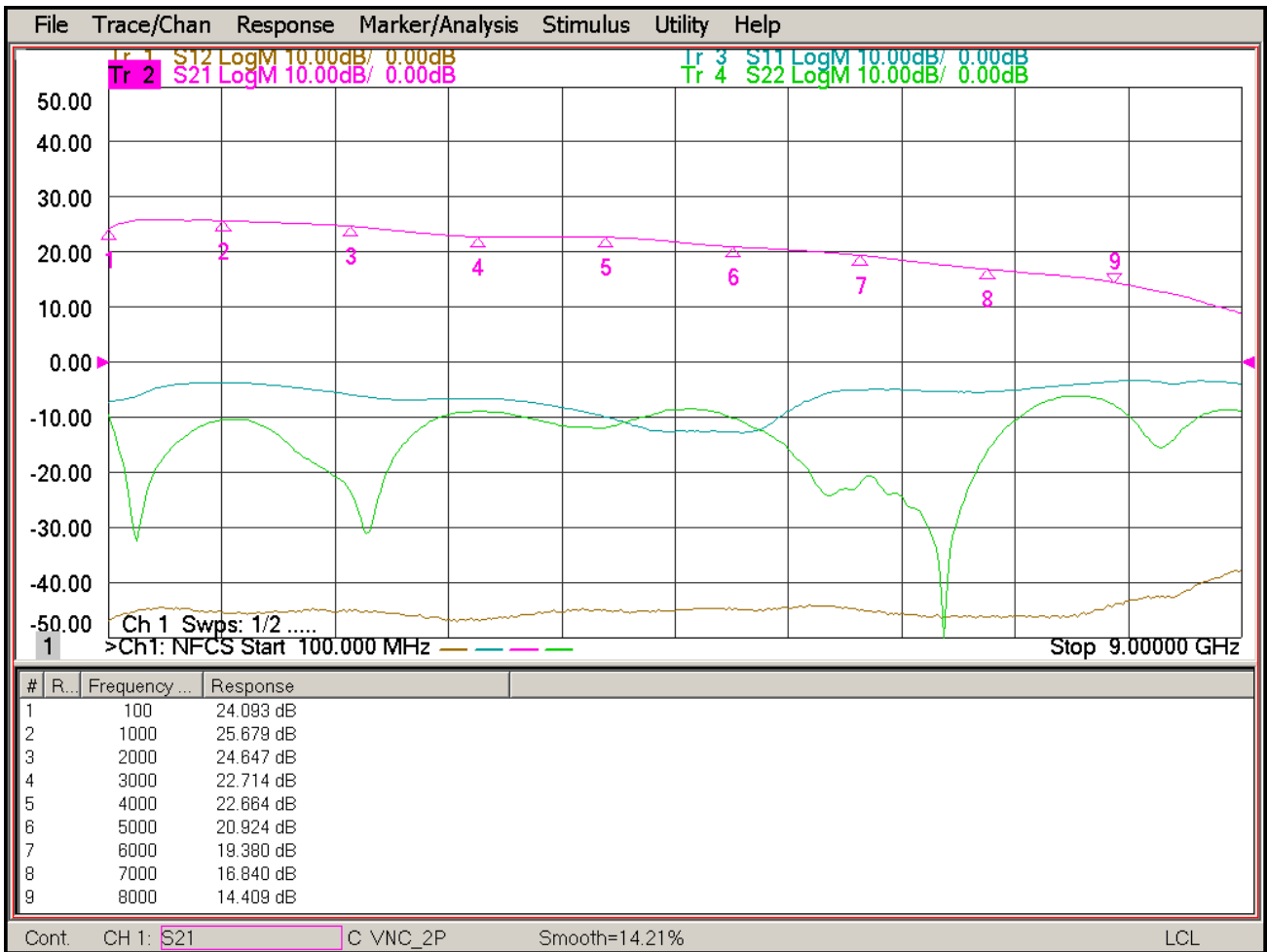


Figure 1: S21-response example.